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Introduction: Guiding Principles of Waldorf Methodology

Developed by the Pedagogical Section Council of North America
And the Association of Waldorf Schools of North America, 2014

These principles summarize core pedagogical impulses that permeate the curriculum of the Emerson Waldorf School. They represent a set of shared principles common among all Waldorf schools in North America. Our teachers actively work with these basic principles.

Image of the Human Being
Waldorf schools work actively with a variety of insights from Rudolf Steiner for understanding different aspects of the human being. One insight that is worked with is that every person in the school community is an irreducible spiritual individuality who is journeying through successive stages of physical, emotional and spiritual development.

In practice, all pedagogical, administrative, and economic policies and operations of the school are informed by this anthroposophical insight.

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Spiritual Orientation
Rudolf Steiner provided abundant guidance for developing an inner, meditative life out of which spiritual faculties can arise. This guidance includes individual professional meditations for private teacher use and a collective imagination for the circle of teachers to be used in forming itself into an organ of spiritual perception.
In practice, Waldorf schools are places that consciously support the cultivation of the spiritual faculties of imagination, inspiration and intuition. Waldorf teachers work in an active and ongoing way to cultivate their own spiritual development through anthroposophy. Similarly, a faculty of Waldorf teachers works in a way that forms itself into an organ of spiritual perception. For example, faculty and individual study, artistic activity, and research form additional facets of ongoing professional development.

**Human Relationships**

Waldorf Education is founded on human relationships. This work is designed and implemented in a way that supports and guides the healthy development of each individual student, each class of students, and the school community as a whole. Technologies, be they mechanical, electronic, or biological, are simply used as tools in service of this educational orientation.

In practice each teacher in every class works in a way that instruction is human-centered and in-person. And each colleague and committee works with others in a human-centered way.

**Developmental Curriculum/Phases of Child Development**

The pedagogical program of the school is informed by what Rudolf Steiner called ”a well-developed knowledge of the growing child” and ”an educational instinct” informed by the teacher’s ongoing study of anthroposophy and professional development.

In practice, the faculty of the school works collaboratively and cooperatively to develop and refine this program. Individual teachers then ”invent the approach at every moment” out of individual freedom and in a way that best meet the needs of the individual students, the class community and entire school, as well as respecting the shared pedagogical understandings and decisions of the faculty as a whole.

**“Three-Folding” Impulse**

Waldorf schools are developed from the anthroposophical insights of Rudolf Steiner. The threefold social order related to all aspects of human society, and within the entire social order schools have a very specific role. The “spirit that aspires toward the threefold nature
of the social organism” describes the way in which the overall model of threefolding might be applied to the different activities necessary to operate an effective AWSNA school.

AWSNA takes seriously Steiner’s aim, “The Waldorf School can be successful only if it is completely inspired by the Spirit that aspires toward the threefold nature of the social organism.” (Steiner, The Spirit of the Waldorf School, Lecture 1, 8/24/1919, p. 7). In an AWSNA Waldorf School, therefore:

- The **cultural realm** is about the cultivation and recognition of human capacities, including spiritual potential. It is guided by the impulse of ‘freedom’, so this realm is strengthened through the use of consensus decision making in establishing policies and practices in the cultural sphere that delineate places of agreement and places of discretion.

- The **rights realm** relates to how policies are carried out. It is guided by the impulse of ‘equality’, so its role is to enforce policies to which each member of the community is equally accountable.

- The **economic realm** relates to how human needs are met. It is guided by the impulse of ‘brotherhood’, so activities in this realm are organized and carried out in the spirit of fraternity and mutual support.

In practice, Waldorf schools governance, administrative, and pedagogical structures reflect relevant indications by Rudolf Steiner, establishing practices that are collaborative and implement authority, responsibility, and accountability in the pedagogical (cultural), administrative (rights/legal), and finance (brotherhood/economic) spheres of the school.

**Methodology of Teaching**

The methodology of teaching works consciously with the developmental phase of the students. Before the age of seven the child learns out of imitation rather than direct instruction. In the grade school the instruction should proceed from the students’ soul activities of willing, through feeling to thinking while in the high school the emphasis is reversed. All Waldorf teaching proceeds from the whole to the parts and back again, and addresses the three-fold nature of human being. Rhythm and repetition are key teaching tools throughout the school.

In practice, the teaching methodology is based on the teacher understanding, internalizing, and then presenting the subject or topic in an artistic form.
Pedagogical Decision Making vs. Teachers’ Freedom in the Classroom

An anthroposophically-founded pedagogy informs the policies and practices of the school. All other operations of the school support this orientation in a legal and ethical manner.

In practice this anthroposophically inspired pedagogy and curriculum are developed and reviewed by the faculty. It is the primary responsibility of the faculty.

Rudolf Steiner gave curriculum indications with the expectation that “the teacher should invent the pedagogical art at every moment.” Out of a deep understanding of child development and Waldorf pedagogy, informed by intensive collaborative work with colleagues, the Waldorf teacher is expected to meet the needs of the children in the class out of his/her insights, supported by close collegial consultation.
Grade Level Curriculum Descriptions

“Horizontal Curriculum”

Early Childhood

Early Childhood Curriculum Guide

The aim of our education is that the children grow up in a natural and creative environment to become strong human beings in body, soul and spirit. We follow the indications of Austrian educator and philosopher Rudolf Steiner, who described child development in three major phases:

- 0–7 - development of the will (doing)
- 7–14 - development of the feeling
- 14–21 - development of the thinking

In our Early Childhood program we work with children in the first phase of human development, which is primarily focused on building the physical body and strong healthy senses as a foundation for future learning. It is a time when the child learns best through imitation and play rather than instruction. In the first seven years of life, children are one with their surroundings. An open-ended play environment is provided so that the child’s own inner capacity for transformation can take hold of the natural materials to create and play. Children are interested and feel a part of the natural world. This interest is supported through a large and healthy amount of work and play in the outdoors in all seasons. The children’s own powers of observation and experience of the natural world are nurtured by the use of rich language during circle and story times. The children in the Early Childhood classroom experience the rhythm of the day, month and year through meaningful work, imaginative play, and their own experience of the natural world without the educator offering the burden of abstract conceptual explanation, which is indigestible to the young child. Our environment is warm and nurturing and we endeavor to give children the opportunities to develop their own capacities and faculties which will give them a good base for more academic work when they are older.

Our Early Childhood program offers the following:
Parent/Child Program for parents and their children from age 21 months - 33 months. One parent and child attend together one morning a week from 9 - 11. We offer two classes for eight families each held by one lead teacher.

Nursery Program for children who are 33 months old by June 1st. The program is four days a week from 8:30 to 12:45. We offer two classes for twelve children each held by one lead teacher and an assistant.

Kindergarten Program for children ages four – six years of age. Classes are five days a week from 8:30 -12:30. We offer three classes for up to 16 children each held by one lead teacher and an assistant.

Aftercare/Nap Program, available for both enrolled Nursery and Kindergarten children. This afternoon time is held by one teacher for the Nursery-aged children and one teacher for the Kindergarten-aged children. The program for Nursery children is offered four days a week from 12:45 - 3:00. The program for Kindergarten children is offered five days a week from 12:30 - 3:00.

The Parent/Child Program

The Parent/Child Family

Our Parent/Child program serves parents who have an interest in Waldorf Education and the Emerson Waldorf School, parents who are looking for an opportunity to build community by meeting other parents whose children are the same age. A Parent/Child family desires support in their parenting and seeks understanding of their child’s developmental stage with a window into their child’s future developmental stages.

The first three years of a child’s life unfold step by step. Through movement, touch and balance the stages progress from being held, lying and watching the world, and finding hands and feet for the first time. Crawling, toddling and then walking bring the child upright. Through each phase the parent finds support through community and nourishing creative experiences throughout the seasons of the year.

Meeting the Parent/Child Family

At the Emerson Waldorf School the Parent/Child program is offered as a year-round program meeting on Friday mornings from 9 to 11 a.m. in the Nursery classrooms. The teacher prepares the
room with appropriate toys for the developmental stage of the child under three. Parents are warmly welcomed as they enter and settle with their children and offered a cup of tea. Parents engage in conversation and time is allowed to observe their children’s play, movements, and interactions.

The teacher facilitates conversation based on an article selected and read in advance by the participants. The group may discuss the topic or bring another question to the room. Parents’ questions are shared for the benefit of the group. Once the children are happily engaged in the room and parents have shared their thoughts and experience from the past week we begin a craft, typically a developmentally appropriate toy or a seasonal craft. These meaningful artistic opportunities nourish the parent and enrich the family’s home life.

As the craft and play come to a close the children watch the teacher and their parents tidy the room, carefully putting away each toy. The morning is approached by the teacher and parents with appreciation and care for all that we do with and around the children.

A small circle time follows the tidying of the room. Parents learn lap games and finger plays they can bring into their own home to play with their children. Nursery rhymes and seasonal songs are also offered as a window into our Nursery Program.

A warm nourishing snack has been prepared by the teacher before the class begins. A blessing and beautifully prepared table bring a special mood to the meal. We end our morning with a walk in the woods, where we explore the seasonal changes and slow our pace so the children can take their time outside before we depart at 11 a.m. The Nursery play yard is available to the children and their parents until 11:30 a.m. with a teacher available to answer any questions that may have come up during the class.

**Indications the Parent/Child class has met the Families’ Needs**

A sense of community is built in the few hours that we meet each week over the year-long program. Many of the families from the Parent/Child programs exchange information and come together outside class to continue this connection. It is a natural transition from Parent/Child to our Nursery Program where children who are ready to separate from their parents can continue their social development. Parents too can continue to be supported in their parenting as their understanding of Waldorf Education grows.
Nursery Program

The Nursery Child

The Nursery Program at the Emerson Waldorf School serves children who are 33 months old by June 1st. The Nursery Child may already be familiar with the environment, having been previously enrolled with their parent in the Parent/Child Class. It is also possible that this will be the Nursery Child’s first experience in the classroom. In most cases the Nursery experience will be the first time they will be in a social environment away from their parents. The program serves as a gentle transition into a classroom that is warm and homelike where the children can learn to be completely independent in their self-care. It supports their beginning interest in other children and the social experience as they transition from parallel play into beginning social play.

Meeting the Nursery Child

The teacher warmly greets the parent and child as they enter into a homelike classroom. The parents assist their children in their bodily care for the morning, changing into inside shoes, visiting the bathroom, and washing hands. Aprons are put on to indicate that it is time to begin the day in the Nursery. Kisses and hugs are exchanged as the parents go off to their work and the children begin their day’s work. Each day of the week is marked by a purposeful domestic task or creative artistic work. The children bake bread and prepare soup to be shared at snack time. Drawing, painting and crafts are offered throughout the year. As the morning unfolds the teacher and assistant continue in the domestic tasks needed to smoothly run the classroom, such as ironing linens for the table and washing cutting boards. The meaningful adult activity serves as a model for the children. The morning work follows a weekly rhythm that the children can always count on. Having a weekly rhythm protects the children’s bodily forces by reducing anxiety and giving the children an experience they know they can count on week after week.

After the morning work is completed the children play in a free and imaginative way. The teacher is there to guide the children in their play and to support healthy social interactions. The toys offered to the children are natural: wooden blocks, cotton and silk clothes, handmade dolls, nuts, stones, shells, pine cones. All of the toys allow the children to create anything from their imagination during play. The children further experience growing care for the classroom as each toy is carefully put back into its proper place as free play comes to a close. As we tidy and care for the environment, the children have another planned opportunity for self-care with a trip to the bathroom.
After the room is tidy we gather for a circle. The circles have seasonal themes and change through the year; they include songs, rhymes or acting out a story involving large movement and balance. Once a week at this time the children have Eurythmy, taught by an Eurythmy Teacher. All of this is done through imitation. This is followed by a healthy snack of warm grains that vary from day to day, and fruit or vegetables.

The children go outside with a full stomach and renewed energy appropriately dressed for the weather. This practice builds healthy, joyous children who are happy to be in the sunshine or the rain. They enjoy a play yard that offers opportunities in an outside environment to exercise both gross and fine motor skills for healthy development. The days are spent playing in the yard, gardening or going on walks in the forest discovering insects and plants and walking on the fallen trees.

The children learn to care for their own bodies, the other children and their environment. It is of the utmost importance that the teacher is able to hold a mood of joy and appreciation for her work in the classroom with the children. When any strife arises the teacher must maintain objectivity and humor in all her exchanges with the children and co-workers. Happiness, wonder, and gratitude for the Nursery morning are present in every gesture.

**Aftercare/Nap Program**
Aftercare/Nap is available for those children enrolled in the afternoon. The program is held by one teacher. The students eat lunch, go to the bathroom and join together in one classroom for rest. When rest is finished they help pack up their nap things, have a snack and go outside for playtime.

**Indications the Nursery Child is ready for Kindergarten**
- Ability for self-care in the form of bathroom independence and dressing for the outdoor play time
- Interest and growing ability to imitate teachers’ gestures
- Growing ability to participate in purposeful work while accompanied by an adult
- Interest and growing ability to follow along orally in song and verse
- Growing ability to care for and develop proper use of artistic materials
- Growing ability to move body in space with increasing control and confidence
- Ability to play independently and a growing ability to play socially
Parent Work for Nursery and Kindergarten

In both the Nursery and Kindergarten we offer parent evenings to share the experiences of the classroom and discuss child development. These meetings build a community of support and understanding for the developing needs of the young child.

We offer parent/teacher conferences twice a year. We are in communication with parents either with daily check-in at pickup or phone calls and emails in the evening.

We celebrate a rich festival life. As we journey through the cycle of the year and the changing seasons, festivals help the children participate in school traditions. This introduction to our school’s festival life builds community and enriches home life.

We offer a parent library of books pertaining to waldorf education and the development of the young child.
Kindergarten Program

The Kindergarten Child

- Learns through imitation, repetition and rhythm
- Learns through integrating experiences in play
- Experiences the environment as an open sensory being
- Develops the foundation of the physical body and organs through healthy movement
- Experiences wonder and reverence through devotion to the natural world

Meeting the Kindergarten Child

Our warm and welcoming environment focuses on play. The activities we provide are designed to encourage the development of the sense of life and well-being. Our aim is to help the children develop healthy bodies and learn to direct themselves socially, emotionally and in their thinking.

Play is the central activity of our Early Childhood education. Through play children learn to grow in their imagination. Children develop tolerance and social skills, fine and large motor skills and the use of language. We consider imagination one of the essential foundations of creative thinking in later life. Our toys are simple and allow open-ended use that encourages children to use their imagination in many ways. This helps develop divergent thinking, the basis for problem solving. Our toys are made out of natural materials – wool, silk, wood, cotton and other things found in nature. Children are free to create their own world imitating life. The children digest the experience of the world, recapture it in play and in later years transform it into focused creative and academic work. Play is the work of the young child.

All classes offer free play, circle time, outside play, weekly artistic and domestic activities and storytelling. Circle time is seasonally based. The gestures are directed by the teacher and include song, verse, games, poems, gross and fine motor skills and the experience of expansive and contractive movement. The teacher strives to bring archetypal movement worthy of imitation that encourages healthy growth and development. It is a joyful time for the children to engage in teacher-led movement together as a group.

Children are told stories daily in the classroom. Repeated storytelling builds up memory forces, pictorial thinking, language development and vocabulary. Repetitive storytelling helps myelination
of the neural pathways, fostering good memory. In this period of early childhood development, rich living language is the best preparation for learning to read and write in the grade school. We also act out our stories in puppet shows and small plays to help creative play and memory. Stories include fairy tales from around the world, nature tales and repetitive stories.

In the Kindergarten we celebrate many festivals of the year, including both the naturally occurring changes in nature and the cultural backgrounds of the families involved in the classes. Preparation for festivals usually includes a craft, special food, songs and poems and a story or puppet show. Certain festivals and each child’s birthday include the parents in the celebration. A rhythmical environment gives a sense of security and well-being to the child. The children feel safe and held when they know what to expect.

The weekly activities include some of the following:

- **Artistic** – painting, drawing, beeswax modeling and seasonal crafts
- **Practical** – sewing, handwork, gardening and woodwork
- **Domestic** – food preparation (chopping, cutting, mixing, pouring, stirring, measuring, grating), baking, grinding flour, making butter
- **Outside play** - a time for the children to experience the elements – sun, rain, dirt, warmth, cold etc. The children are allowed to run, jump, skip, climb and swing. Children also go on walks and help to build and garden. Formed games occur and imaginative play is active.
- **Eurythmy** - A movement circle taught by a Eurythmy Teacher

We work in a mixed age group letting the first-year children observe and experience various festivals and projects. The older children are given extra developmentally-based artistic and practical projects and responsibilities.

**Aftercare/Nap** – Is available for those children enrolled in the afternoon. The afternoon program is held by one teacher. After students have eaten lunch with their classes they go to the bathroom and then join together in one classroom. They look at books, have a story read to them, hear lyre music and then are tucked in for rest. After rest they pack up their nap things, have a snack, then go outside for playtime.

**Kindergarten Student Learning Expectations**

- Show engagement and ability to imitate teacher’s gestures
- Show ability to participate in purposeful work while accompanied by an adult
● Show Interest and ability to follow along orally in song and verse
● Gaining ability to move their body in space with increasing control and social awareness
● Follow verbal sequential directions
● Show ability to play both independently and socially
● Show cognitive sequencing by an understanding of time
● Show impulse control and the ability to wait
● Show an increasing attention span needed for grade school academics
● Show the developed core strength of the torso to be able to sit and focus
● Show mastery with 6 year curriculum projects as an indication towards independent work
● Show an ability for self-care – for example - bathroom independence and dressing for outside play
● Show an ability to care for their physical environment – example – clearing their place from the table and putting away toys after playtime

Kindergarten Assessment
● Teacher observation and documentation
● Formal Grade 1 observation that incorporates both the Teacher and the Educational Support Teacher (a copy of this observation can be provided upon request)

Grade School

General Pedagogical Overview

Characteristics of this stage of development
Between the ages of approximately seven and fourteen children have completed the physical growth and change that makes school learning possible. At this time, they enter a new stage which is concerned with the development of habits and techniques. In a healthy situation, the child is filled with curiosity and a love of learning. This new interest in school is nurtured through a relationship of loving authority between the teacher and student.
Educational principles that guide the methodology during this stage of development

Whereas early childhood was typified by imitation on the part of the student, the student now looks up to an authority (teacher) for guidance and direction in learning. As the curriculum unfolds and the students grow, an increased degree of imagination and initiative are expected from the students. During this period, a wide array of capacities may be drawn out of the student that can show a quality of discernment.

Capacities

Anticipated outcomes at the completion of this phase of schooling. Create the conditions to foster, nurture, and develop the capacities of:

- Self discipline
- Interest in Learning
- Will to work
- Self confidence
- Ability for independent thinking
- Gifts/challenges - self knowledge
- Appreciation of others' gifts and challenges
- Literacy
- Numeracy
- Openness to the world and interest in the world
- Sense for living geography/history
- Creativity in the will/work and initiative
- Harmony of the physical body
- Appreciation for the uniqueness of the human being/nature
- Phenomenology (keen sense of observation)
- Empathy/compassion
- Sense of wonder
- Imagination
- Analysis/synthesis
- Integrity
- Unlimited sense of others and self potential
- Responsibility of self and world
Skills

- Humility Sense of humor
- Listening and note taking
- Reading comprehension
- Creative/expressive writing
- Expository research
- Facility in math processes/calculation and application
- Spatial reasoning
- Objective observational skills
- Memory/recall, auditory and visual recall
- Problem solving strategies
- Test taking skills
- Research skills
- Social skills (collaboration, listening, impulse control)
- Competence in a second language
- Sight-reading music
- Physical skills
- Manual skills
- Artistic skills
- Public speaking
- Fundamentals of drama and stage awareness
- Speech and trained articulation
- Handwriting

Evaluation tools used
Each student is evaluated according to his or her own ability with an aim that all students progress at a reasonable pace through the grade school curriculum. Classroom observations are compared against skills checklists, and progress is reported to parents three times a year to evaluate student. Interim reports are given by subject teachers in Fall and Winter or when a special report is needed. Written reports are given at the end of each year for parents to gain a picture of their child’s learning for the year. In addition to classroom observations, portfolio evaluations, and informal
performance evaluations, students in grades five and up are evaluated through the use of written quizzes and tests, formal writing assignments, and formal project-based learning.

**Primary Grades**

**Evaluation tools used in grades 1 – 3**

Skills checklists are used three times a year to evaluate student progress. Interim reports are given by subject teachers in Fall and Winter or when a special report is needed. Written reports are given at the end of each year for parents to gain a picture of their child’s learning for the year. No formal evaluations are given during the primary years.

**Grade 1**

**Grade 1 Curriculum Overview**

At the age of six to seven the children are crossing a threshold from the first to the second seven-year period of childhood. Whereas in the first seven years, the children were primarily focused on physical growth, now they begin to open their hearts to the world around them and develop the life of feeling. It is at this time that we begin to introduce the child to a formal learning experience.

While the academic skills one learns are important, we also endeavor to cultivate a healthy moral and social sense in the child. This education of the whole child begins on the first day of school with the establishment of healthy individual and class habits. The working habits support the children’s learning efforts throughout the grades journey by creating a rhythm and structure that strengthens them. The ways of being with one another and honoring that person are also essential to forming a cohesive and unified social body in Grade 1.

Grade 1 is truly a year of firsts – how to speak collectively when reciting a verse, how to answer a question, how to hold a pencil for writing, how to use block and stick crayons for drawing, how to care for materials, how to play with another or others, and much more. Those initial experiences create habits that can serve a child as he or she transitions through the grades journey and beyond.

The lessons of Grade 1 are foundational and seek to prepare the children for all that they will encounter in their academic years ahead. For example, the exploration of 'straight and curved lines' in Grade 1 lays the foundation for later written letters and numbers as well as formal geometry. Each subject is presented in a seminal form to allow the children ample time to take it up as the year
progresses. All that is done in Grade 1 is aimed at creating a rich learning environment in which the children’s capacities and skills may germinate and flourish.

**Language Arts: Fairy Tales and Nature Stories; Letters**

Initially, the language arts lessons involve the presentation of the letters. The letters are brought in a way that is characteristic of their evolution through the ages – from the oral, to the pictorial, to written/symbolic expression. As a teacher shares a fairy tale or nature story, a picture or image emerges. From this picture, which is drawn on the blackboard, a letter is revealed. Through alliterative verses, the children experience the character of each letter (e.g. the fiery aspect of the f-f sound; the pushing away quality of the g-g sound; the holding gesture of the b-b sound, etc).

After a dozen or so consonants and all of the vowels have been shared, the children begin to write teacher-directed phrases or sentences from the story presented. The writing thus becomes the first reading assignment for the group. The excitement the children experience upon discovering a letter contained within a drawing is met once again when reading the letter combinations that appear on the board and then inside the pages of their Main Lesson books. All the while, emphasis continues to be placed on the correct formation of the letters along with maintaining a proper grip for handwriting.

**Mathematics: Number Qualities and the Four Operations**

The essence of numbers is first introduced to the children. The same qualities are found in the human being and in the natural world. For example, the number one is a unit that represents wholeness, “oneness” as seen by the archetype of the self, or the concept of “I”; two represents polarity or symmetry such as the sun and moon, day and night, two eyes, ears, arms and hands, legs and feet; three is trinity and is expressed as father, mother, and child or found in the shape of a triangle; and so on. The children work with both Roman and Arabic numerals.

In the second block of mathematics, the four operations are introduced. Addition, subtraction, multiplication, and division are presented via a story in which characters embody the quality of the particular operation (e.g. Peter Plus gathers jewels slowly; Toby Times quickly collects the gems; Melvin Minus loses or gives away his jewels; and David Division shares his jewels equally among others). The numbers are worked in a variety of ways: rhythmically through stepping, clapping, and counting forwards and backwards; listening to the number of claps or steps made or tones on a flute
played; using manipulatives such as counting jewels; visually identifying the number represented through a pattern. The multiples of 1 through 12 are practiced most thoroughly at this age by way of the number rows (e.g. 0, 2, 4, 6 through to 24), providing a foundation for further arithmetic work such as the times tables in Grade 2. Mental math exercises are performed daily to help the children maintain a facility with numbers.

**Visual Arts: Painting, Form Drawing, Sculpture**

**Painting:** The children paint with watercolor on wet paper; the fluidity of the paint and painting surface mirrors the children’s flowing imaginations at this developmental stage. The teacher begins with a demonstration of the painting, which is unveiled by way of a simple color or nature story or a reference to a passage in a fairy tale shared during Main Lesson. The children then paint what was demonstrated.

The mood is a quiet one. Initially, the children experience the quality of each of the primary colors: yellow, red, and blue. A single color is thoroughly explored, then the children progress to two colors, which when mixed together reveal a particular color combination. While the children may understand that red and yellow create orange, the imaginative way the colors join together allows the children to feel the “magic” that is revealed in that mixing.

**Form drawing** serves to strengthen and support much of the children’s other work. The first lesson, which is common to all Grade 1 students on the first day of school, is the introduction of the straight and curved lines. The children have enthusiasm for finding these lines on their bodies and in the classroom. Pedagogically, these lines begin our lessons, for indeed they can be found in all that we see, touch, create. From the straight and curved lines, the children segue into various manifestations of the two dynamic forms that make up our world. After a form is demonstrated, the children practice the form using a variety of tactile experiences, such as—moving the forms on the floor, the blackboard, a neighbor’s back, or simply drawing in the air. The final step is drawing the form on paper.

Form drawing has many advantages. Since it builds spatial awareness and eye-hand coordination, form drawing helps to enhance fine motor skills, paving the way for more beautiful writing. The dynamic nature of these forms educates the children to follow a complicated thought pattern. In addition, the geometric quality inherent in form drawing supports future mathematics lessons in
later grades. Since the children work with the proportion and feeling of a form, it also helps to instill within the child a sense of beauty and aesthetic awareness.

Due to their balancing qualities, form drawing lessons occur each week. Form drawing lessons are often taught after holiday vacations to help re-establish the rhythm of Main Lesson and as a transition to a new lesson block.

**Modeling:** The children, led by the teacher’s example, create simple figures using beeswax or other modeling material. The figures chosen have been introduced via the Main Lesson. The children shape a form out of one piece of material rather than adding pieces together (e.g. a bird forms begins as an egg shape that then becomes the bird’s body as the head, tail and wings are stretched out from it). The development of the human hand parallels that of the human brain; the flexibility of the hand is connected to the flexibility of thinking. Modeling small forms develops fine motor coordination and establishes a foundation for the child’s ability to “model” when thinking.

**For the following subjects, see specific subject documents:**
- Music
- Foreign Languages: German, Spanish
- Eurythmy
- Handwork

**Grade 1 Student Learning Expectations:**

**Language Arts**
- Recognize all upper case letters in print
- Know the sound of initial, medial and final consonants
- Know hard and soft consonant sounds (g,c,y)
- Identify variations in vowel sounds
- Identify variations in consonant sounds
- Demonstrate the ability to write and copy simple words and sentences
- Demonstrate the ability to track and copy text from blackboard to paper.
- Begin to recognize short familiar words and letters in context
- Begin to recognize short familiar words introduced (the, and, but etc.)
- Speak in complete sentences
- Express ideas clearly in speech
Accurately recall stories or events in sequence

Demonstrate ability to articulate and repeat sounds and words

Create a simple sentence from a story or an event

Develop their quality of speech in these areas: enunciation, volume and fluidity.

**Mathematics**

- Count to 100, backwards and forwards by ones, fives and tens
- Count by twos, threes, fours, and sixes
- Clearly write numerals 1-100
- Demonstrate ability to work math problems mentally
- Know all sums of ten
- Recognize odd and even numbers
- Demonstrate grasp of the concept of zero.
- Demonstrate ability to perform all four operations.

**Grade 1 Assessment**

- Story recall from memory
- Writing samples
- Performance in drama
- Choral speech work
- Group reading
- Main Lesson books
- Mental arithmetic problems
- Math work with manipulative objects
- Group and individual counting
- Number row memorization

**Grade 2**

**Grade 2 Curriculum Overview**

Between age seven and eight, the children are transitioning from a dreamy, fairy tale consciousness where the world is seen as primarily good, into a newly developing consciousness of the endless dualities of human nature. As the growing children mature, they begin to gain awareness of their
own challenges and how they choose to meet them. For example, polarities such as patience vs. impulsiveness, kindness vs. selfishness, humility and arrogance are allegorically presented to the 2nd Graders. As they explore these themes in the curriculum, they begin to approach the delicate understanding of how their own personal choices define their character, and how one can grow towards goodness, beauty and truth. The 2nd Grader still loves to learn through games, including gross motor cooperative exercises and rhythmical movement activities, as well as fine motor exercises, poems, prose, verse and song. The 2nd Grader is eager and ready to learn and their motto is “practice, practice, practice.”

**Language Arts: Saints and Fables**

Children in Grade 2 are awakening to the fact that not all is good in the world. While they still strive to be good and do well, they are increasingly aware of the more complicated temptations and lower inclinations of human nature. At this time, the child is introduced to the rich and varied stories of saints and fables. The saint stories tell of everyday people who strove to unusual heights of moral conduct during their lifetimes. These stories inspire the children and call to their inner desire to strive toward good deeds in the world. In contrast, the fables, drawn from Aesop and other sources, illustrate the lower nature of the human being. These often delightful stories speak to the child deeply as well, acknowledging the struggle to rise above their own lesser instincts, such as greed, vanity or pride. This polarity of images meets the child’s soul as he or she develops new cognitive faculties, moral feelings, and burgeoning will forces.

**Science: Nature Study**

In Grade 2 the science curriculum continues to be experientially-based as we observe and enjoy the four seasons through crafts, songs, poetry, nature walks and stories. Beginning zoology is introduced as the children hear about the characteristic behaviors of a multitude of animals. The nature studies lessons nourish the child’s sense of wonder and interest in the surrounding environment and at the same time support the Language Arts curriculum.

**Arithmetic**

In Grade 2 the children are rhythmically reintroduced to all of the times tables from 1x1 to 12x12. They count many objects and find ways to categorize and group them efficiently, leading to hands-on learning exploration and understanding of place value through the thousands. They may practice vertical math processes for addition and subtraction, as well as horizontal word problems.
that allow for flexible problem-solving as students move deeper into the universal world of numbers, gaining confidence in their ability to solve more difficult calculations. Basic number facts continue to be memorized in rhythmic patterns.

**Visual Arts: Painting, Form Drawing, Modeling**

**Painting:** Watercolor painting employs fluid paint on wet paper to enhance the flow of color and simultaneously stir the imagination to life. The “soul-quality” of color is continuously revealed as children explore color and form, for example, one may experience serenity when painting a heavenly blue sky or austerity when adding royal purple to a cloak. In Grade 2 a widening characterization of colors occurs. The happy yellow can become sad or shy when accompanied by certain colors or when it has different intensity. Painting provides a wide variety of color exercises, such as exploring complementary color pairs; painting the same color on a different background, practicing variances of tone, etc.

**Form Drawing:** Drawing in Grade 2 further assists orienting the developing child in space. Children benefit as they practice finding their own center, as well as the center and periphery of a page or room. Practice of these basic forms along with continuous, careful drawing of horizontal, vertical and curved lines will aid their Main Lesson bookwork and social interactions alike. The focus in second grade is on forms that reflect a mirror image horizontally, though sometimes quadrants are also drawn. These forms challenge students to use greater willpower in their thinking, as well as skill in their drawings as they flip images in a variety of directions, promoting fluidity of thought. The mirrored, symmetrical forms reflect the 2nd Graders’ task—to experience the duality of the higher and lower aspects of the self. Running forms that link together also help the children achieve balance with one another. The forms and colors can be used therapeutically. Usually a story or an image offers an imagination of the movement of the line.

**Modeling:** Using different media, such as beeswax, clay or plasticine, the children model archetypal forms of animals, people, etc. The stories told to them provide the ideas for their modeling. Modeling promotes dexterity and continues to develop a feeling within the child of moving from the whole to the parts. Modeling also awakens and fosters the child’s ability to picture things as the sense of touch is nourished.

For the following subjects, see specific subject documents:
Grade 2 Student Learning Expectations

Language Arts

- Demonstrate ability to listen to stories with sustained attention, accuracy, participatory imagination and good memory
- Build vocabulary
- Gain skill in writing of printed letters (upper and lower case)
- Accurately retell a story from memory, including characters, sequence of plot, and details, using clear expression and proper speech
- Participate in discussions, offering interpretations and commenting on the themes and details of the stories
- Effectively dramatize parts of stories
- Demonstrate ability to accurately copy a text from the blackboard, with attention to spacing between words, sequencing, paragraphs, and borders
- Begin to write sentences for Main Lesson books as a class and individually
- Read and write simple spelling words and word families; change letters to discover new words, and demonstrate phonetic awareness.
- Investigate basic spelling rules
- Practice long and short vowels, diphthongs, consonant blends
- Spell and write sight words
- Read aloud what they have written in their Main Lesson books
- Read printed readers
- Recite poems and sing songs from memory using gestures, in groups and individually
- Draw pictures from stories – both copied and original
- Identify basic punctuation (period, comma, question mark, exclamation point and capitalization)
- Understand the action words (verbs) and naming words (noun)
- Practice writing simple sentences
- Begin alphabetizing
• Know commonly used irregular words, e.g., ‘was’, ‘are’, ‘said’, ‘have’
• Begin to take simple dictation
• Demonstrate beginning proofreading skills
• Demonstrate beginning rewriting skills using teacher corrections

Science
• Practice using senses to observe the natural world.
• Describe animals
• Compare and contrast behaviors of animals and characters in stories
• Discern identifying characteristics and gestures of animals.

Mathematics
• Comprehend the four operations and the use of their symbols (including “equals”)
• Practice addition and subtraction facts in region of 20 (number bonds)
• Understand and know place value up to 1,000
• Write numbers in distinct columns
• Add numbers of two or more digits in columns
• Read and write numbers up to 1,000
• Write, read, move, clap to various number patterns in order to recognize, remember, and comprehend patterns of numbers
• Practice the multiplication tables 1-12 from whole to parts (12 is 3 times 4), and then from parts to whole (3 times 4 is 12)
• Understand the relationship between multiplication and division
• Solve written and oral problems using math processes
• Create word problems which match a given algorithm
• Demonstrate ability to work arithmetic problems mentally
• Recognize and name basic geometric shapes
• Recite math poems
• Be able to check and prove subtraction and addition problems by inverse
• Distinguish odd from even numbers
• Estimate numbers

Visual Arts
 Independently prepare for painting
 Identify the primary colors of red, yellow, and blue
 Identify the secondary colors of green, orange and purple; know how they are made
 Grade colors by adjusting dilution. Investigate how shades and the intensities of color can be changed
 Feel the colors' gestures. See how they change in different interacting situations. Associate the feelings stimulated by stories and fables with the color's moods and behavior
 Collect and discuss observations
 Accurately follow directions in painting
 Demonstrate appreciation of others' work
 Demonstrate ability to model a variety of forms as assigned
 Transform a ball of wax or clay or mud into a figure through pressing, pinching and pulling the matter
 Reflect a gesture in a model or drawing
 Draw common geometric forms freehand
 Draw running forms (individually or two together)
 Draw combinations of straight and curved lines
 Draw increasingly complex forms, including the weaving of lines
 Demonstrate ability to complete symmetries (left/right, above/below)
 Transform a form drawing from straight lines to curved lines and vice versa
 Develop surer and freer use of drawing materials while maintaining proper pencil/utensil grip.

**Grade 2 Assessment**

- Class or group observation
- Group and individual reading
- Story recall from memory
- Singing and reciting in group or individually
- Performance in drama (quality of expressions, speech and gestures)
- Teacher observation of discussion in class
- Quality of drawings
- Completion and accuracy of writing
- Independent writing
- Care and neatness of book work
• Observation of rhythmic movement participation in class and playground
• Mental and written arithmetic problems
• Quizzes
• Art works in portfolio, Main Lesson books

**Grade 3**

**Grade 3 Curriculum Overview**
The central guiding principle of the curriculum of the Third Grade is a response to the changing consciousness of the child who is turning nine. We are aware that around this time, the child experiences a shift in consciousness, a move into a new phase of the child’s inner life. The child becomes more self-conscious, more aware of his/her separation from others. There is a new sense of being cut off from the joys of early childhood; there are questions about many things, some of them quite profound; there is a growing sense of loneliness. There is a moving away from parents and friends and a moving into the world of one’s own self.

The curriculum is meant to reassure, to nurture, to help the child to move ahead with confidence through this sometimes difficult transition. Each morning the children work through exercises in recitation, singing, flute-playing and rhythmic activities as a way of entering into the work of the day. The major themes for language arts study are taken from the stories of the Old Testament. These give a picture of the joy of life in the Garden of Eden, the expulsion from the Garden and the human being’s need to work on the earth, to transform the earth for food, shelter and clothing. These stories tell of a people who wander the earth in a search for their home on the earth; they speak to the child in an unconscious but deep way: “Others have done this before me; I am not alone in this experience.”

**Language Arts through Hebrew Stories**
Hebrew Stories Block I – Creation Stories; Adam and Eve; Cain and Abel; Noah’s Ark
Hebrew Stories Block II – Abraham and Isaac; Jacob; Joseph; Moses (great individuals who carry responsibility and face moral decisions)

Methodology and content:
• Chronological history using Hebrew stories
• Dramatizations of the stories
• Morals of the stories
• Retelling of the stories
• Writing of the stories (group and individual)
• Drawing, modeling and painting depicting story content (copied and original)
• Characters, plot, setting, description
• Listening to the Hebrew language
• Grammar
• Vocabulary and spelling
• Singing and poetry relating to Hebrew stories and festivals
• Awareness of Jewish holidays and foods
• Beginning dictation
• Compare size of Noah’s ark to other familiar things (buildings, etc.)

**Arithmetic**

Overview:
• Review time to intervals of one minute (throughout year)
• Review money: make correct change up to $20 and know all monetary denominations up to $100
• Recognize and understand mathematical vocabulary: subtraction, multiplication, addition, division, equal, less than, greater than, even numbers, odd numbers

Arithmetic Block I Content
• Place value (review and extend)
• Longer addition/subtraction (review and extend)
• Charts and graphs, recipes (extend)
• Math vocabulary
• Quantify concepts
• Multiplication and division by 10, 100, 1000
• Number line use

Arithmetic Block II Content
• Math vocabulary
• Estimating
• Rounding off
• Proving solutions
• Division with remainders and long division
• Multiplication with regrouping (extension)
• Associative and commutative properties of processes
• Word problems

Measurement Block Content
• Historical background – relationship of human body to unit of measurement and derivation of standard measure of length (e.g., thumb—inch; arm—cubit; pace—foot; nose to fingertip—yard)
• Units of length – inch, foot, yard, mile
• Liquid measure – ounce, cup, pint, quart, gallon
• Weight – ounce, pound, ton
• Practical applications of linear, liquid and weight measurements
• Cooking with recipes
• Terms for fractional parts (1/2, 1/3, etc.)
• Estimation in measurement problems
• Graph a particular story, i.e., graph of class heights
• Inequality symbols (•, •, =, i.e., cup • gallon)
• Problem solving
• Containers of different shapes
• Review of calendar and clock

Science: Farming; Foods; Clothing; Housing
Farming/Foods Blocks I and II
Content (Science, Weather, Language Arts, Social Studies, Math)
• Planting (cycles, what crops are planted and when)
• Seasons (varies depending on climate)
• Machines (used on the farm and evolution over time)
• Grain (7 kinds and uses)
• Field trips related to block (farm, museum, bakery, grocery store)
• Recite poetry related to farming and foods (seasons, planting)
• Drawing (grains, farms, both copied and original)
• Beeswax modeling (farming village)
• Painting (different foods/plants on farm)
• Writing in Main Lesson Book
• Properties of soil
• Soil make-up and how farmers take advantage of different soils
• Show that the sun is the center of the solar system
• Identify and use various forms in which data can be displayed (classify and display seeds)
• Recycling
• Understanding of natural resources
• Understanding of erosion
• Learn and sing songs related to foods/farming
• Farm animals as part of the cycle of life on a farm

Clothing Block Overview
• Stories of clothing and its relationship to Adam and Eve (Hebrew stories)
• Describe the origin, process of transformation, and materials used in clothing around the world (the silk caterpillar—silk; sheep—wool; growing cotton—cotton; flax—linen; animal skins and furs) Bring in sample of linen, silk, flax, etc. Do many hands-on activities so that children can make connections to their world
• Foster appreciation of different cultures through studying people’s clothing, i.e., understand how and where one lives determines one’s clothing
• Field trip to see sheep being sheared (oral/auditory)

Housing Block Overview
• Housing from different cultures and times (why)
• Housing in different climates (why)
• Local housing
• Construction (materials)
• Jobs related to house building

For the following subjects, see specific subject documents:
• Music
• Foreign Languages: German, Spanish
• Eurythmy
• Handwork

**Grade 3 Student Learning Expectations**

**Language Arts**

• Understand and effectively use story elements such as setting, characters, problem and solution, sequence of events, and plot to reflect upon meaning
• Observe written Hebrew language (compare/contrast with written English)
• Discuss stories connecting one’s own experience, judgment/associations
• Be able to pass the third grade reading test; meet the district standards
• Read for meaning using strategies such as phonics, context, visual clues and word analysis and organization of texts such as headings, paragraphs and italicized words to improve understanding
• Read a variety of grade level narrative and expository texts with fluency, comprehension and expression, independently for pleasure and information
• Apply good reading strategies (such as setting goals for reading, previewing texts and prediction) to various reading tasks such as activating prior knowledge, self-correcting and self-monitoring, rereading, finding context clues, developing visual images
• Interpret information from illustrations to convey meaning and their connections to the accompanying written texts
• Write narrative/descriptive compositions (MLB)
• Utilize the writing proficiency steps: idea generation; gathering information; developing a rough draft; self, peer and/or teacher corrections, and producing a final copy
• Generate a sentence or paragraph that describes the main problem/idea, theme, and key relationships in narrative and expository text (also Hebrew stories)
• Recite poems from memory in groups and individually
• Learn and sing songs related to block subject matter
• Listen to songs and/or poetry recorded or spoken in Hebrew
• Listen to and retell more complex stories factually and sequentially in a variety of modalities: oral, written, dramatization and painting
• Retell stories accurately, including characters, sequence of plot, details, using clear expression, formal speech (oral/auditory)
• Take dictation
Grammar/Spelling/Punctuation/ Vocabulary

- Use paragraphs, capitalization, abbreviations, basic rules of grammar and correct spelling consistently and effectively
- Use punctuation appropriately: period, comma, exclamation point, question mark, quotation marks, apostrophe, paragraphs, capitalization (titles, names, first words in sentences, abbreviations)
- Spell correctly using a wide variety of age-appropriate words
- Identify the following parts of speech: nouns, pronouns, verbs, adjectives and adverbs
- Identify synonyms, homonyms and antonyms
- Know vocabulary words and use them properly in sentences (oral/auditory/homework/quizzes)
- Act out and narrate a play from Main Lesson work with more individual roles
- Participate in a Class Play
- Develop and use neat, clear, concise, cursive penmanship
- Follow a set of written and oral directions
- Demonstrate beginning research skills such as looking up information in the library

Social Studies

- Appreciate different cultures
- Build an understanding of chronological history using Hebrew stories
- Learn to play Jewish children’s games (e.g., the Dreidel Game)
- Examine biographies, stories, narratives and folk tales to understand the lives of ordinary and extraordinary people
- Understand that people use a variety of plants and animals
- Describe the interdependence among human beings, animals and the earth
- Build an understanding of chronological history using Hebrew stories
- Understand that where and when one lives influences how one lives
- Appreciate how and why people’s clothing is different around the world (climate, natural resources, technology, etc.) (oral/auditory)
- Compare and contrast clothing (oral/auditory)
- Examine biographies of people who have influenced clothing (oral/auditory)
- Identify houses from different cultures (checklist)
- Explain why people live in different types of houses (discussion)

Arithmetic
• Recognize and understand mathematical vocabulary, including a cubit (from Noah’s ark story)
• Discover through measurement (cubits) how large Noah’s Ark was said to be (length, width, height)
• Compare the size of the ark with other familiar objects/building
• Construct and read accurately graphs and charts depicting a variety of information
• Follow written recipes
• Understand math vocabulary (sum, total, difference, quotient, remainder, square numbers)
• Solve problems in all four processes using a number line
• Prove the solutions to problems in all four processes
• Understand the relationship between the different processes and use these to solve problems
• Estimate quantities of objects: 100, 1000, 5000, 10,000, etc.
• Multiply numbers quickly by 10 and multiples of 10
• Divide even multiples of 10 by other multiples of 10
• Be able to read and write numbers to 1,000,000 accurately
• Solve very long problems in addition and subtraction using regrouping
• Master basic addition and subtraction facts
• Find factor pairs for numbers in all the multiplication tables
• Estimate answers to word problems and use estimation and a number line to solve problems
• Round off numbers to the closest 5, 10, and 100
• Identify all prime numbers and square numbers to 20
• Solve division problems by divisors 1–12 and 3-digit dividends (e.g., 862 divided by 12)
• Use the associative and commutative principles to reorder and combine numbers and solve problems
• Relate skip counting to multiplication and division
• Solve word problems (oral and written) – Be familiar with step-by-step process of solving problems
• Explain orally and in writing the reasoning in finding solutions to word problems
• Review and practice all previously introduced materials
• Review odd and even numbers and their characteristics
• Learn multiplication tables 1 to 12 and use in problem solving
• Learn addition/subtraction facts 1 to 20 and use in problem solving
• Explain orally and in writing how to solve problems
• Know basic units of measure and their equivalencies and use them in practical applications
• Be able to estimate length, liquid amount and weight (oral and written)
• Read and follow a simple recipe (including basic fractional parts)
• Accurately draw a simple graph
• Recognize inequality symbols
• Reason about factors that influence capacity (i.e., feature of a container shape, such as height or width)
• Use standard measuring devices to collect data (tape measure, ruler, meter stick, scales and cylinder)

Science
• Utilize problem solving skills within the scientific process: observations, classification, prediction, measuring
• Describe relationships of parts within a system (crop annual life, different functions of plant life, cycles of the year, different grains such as rye, wheat, corn, rice, barley, millet and oats)
• Demonstrate an awareness of how humans affect community environments (e.g. create a compost pile, use an environmental notebook)
• Demonstrate an awareness of how technology (inventions and innovations) in the environment has helped over time (cereal, grain milling, farming techniques)
• Explain that soil is made of particles of stone, dead plant, and animal material
• Discover that soil has properties (i.e., color, texture, smell, mass)
• Make predictions and inferences based on observations of soils
• Relate that properties of soil impact how people use land
• Comprehend that people can prepare for and help prevent erosion
• Understand that growing seasons vary from place to place
• Know that there are varieties of climates in the world
• Discover that animals and plants have an impact on their environment
• Identify different materials used in clothing (quiz)
• Describe the process by which different natural resources (sheep’s wool, silk caterpillars, etc.) are made into clothing materials (oral/auditory)
• Recognize how housing materials and technology have changed over time (oral/auditory)
• Investigate and explain how housing differs in varying climates (oral/auditory)
• Identify simple machines and tools used in house building (quiz)
• Become familiar with the different skills (jobs) needed to build a modern house (game)
• Compare different kinds of houses (MLB)

Visual Arts
• Model and paint scenes from stories; plants and farm scenes; types of houses (teepee, igloo, log cabin)
• Draw pictures from stories and lessons, both copied and original
• Draw pictures of the process of making clothing: silk cocoons to silk; sheep's wool to yarn/woven cloth (MLB and artistic project)
• Model people in beeswax and dress them in different clothing materials (product)

Grade 3 Assessment
• Dictations
• Spelling quizzes
• Writing, drawing and painting in Main Lesson Books (content, neatness, following directions, rough draft, etc.)
• Checklists for poetry, songs and retelling of stories
• Play performance
• Class review of the block; group discussion
• Read stories told in class (small group/peer tutoring)
• Block/unit tests
• Self-evaluation (what student feels he/she has learned)
• Observation in class
• Small group test review
• Observation during second exposure (continued activities in garden, science experiments)
• Checklists
• Recitations
• Mental math problem solving
• Quizzes/morning work
• Word problems
• Graph and chart reading
• Class projects
• Following recipes
Grade 4

Grade 4 Curriculum Overview
Between ages nine and ten the child crosses a threshold, leaving early childhood behind and looking at the world in an increasingly awakened state. In that first experience of their separateness as manifested by critical questioning, and an often challenging voice, children can experience uncertainty and fear. An underlying theme in Grade 4 lessons is that of grounding the children, making them feel at home in time and space. The study of local geography and of the human being in relation to the animal kingdom and the natural world addresses the child’s newly arising inner questions: Who am I? Where am I?

Language Arts: Norse Mythology, Grammar
Children in Grade 4 are learning to feel at home in space and time. They move out into the environment with growing confidence. A study of early world literature (e.g. the Norse Myths) imparts a rich understanding of the cultures from which the child’s present world springs. With their powerful will, their contentious nature and their love of adventure, the Norse gods serve as a remarkably accurate reflection of the 4th Graders who study them. Underlying these extroverted and often comic tales, however, is a hint of pathos and tragedy. The curriculum broadens to strengthen the child’s understanding of grammar and the writing of original, coherent compositions.

Grammar studies help to demonstrate the concepts of past, present, future (verb tense), and space (prepositions), helping to orient 4th Graders in time and place. The children learn to recognize different parts of speech and understand the quality that each part brings to form the whole.

In writing, students are often expected to draft their own Main Lesson texts. Main Lesson writings are supplemented by creative stories, journal entries, observation pieces, and letter writing. Attention is drawn to adding background and descriptive detail. Grouping ideas into paragraphs is emphasized for the first time. Drafts are edited for correct punctuation, grammar, capitalization, and spelling. Final drafts are expected to be in cursive and beautifully presented.

In reading, the advent of proficiency leads students to read for fun, for information, and for understanding. Students move from learning to read to reading to learn. They refer to encyclopedias and other sources to gather information for their first research reports, usually on an animal in conjunction with the Zoology Block.
Building vocabulary grows out of the Main Lesson books and the new vocabulary associated with each new study. Weekly spelling lists are developed from students’ own writings, the Main Lesson block studies, and from lists that reinforce learning basic spelling rules and grade-level words.

In speech work, the focus is on the verses and poems with strong alliteration.

**Mathematics: Fractions, Four Operations**

Fractions represent the threshold that divides “arithmetic” from “mathematics”; for the first time, the class will be working with numbers in a form that is conceptual as well as experiential. Factors are the numerical equivalent of the newly-developing inner life of 4th Grader. When a child grasps the fact that the greater the denominator, the smaller the fraction, we are witnessing an important step in the development of the child’s consciousness.

**Local Geography and Local History**

Fourth Graders, who have a newly awakened relationship to time and space, learn about geography by first making maps of their immediate surroundings (their own bedroom, house, classroom, school grounds) from a bird’s eye view. They learn to see themselves in relationship to each particular place from a different and new perspective, and find that they are part of a bigger whole in both space and time.

As the children study the geography and history of North Carolina and the Cape Fear River Basin, they begin to see that geography is a study of the dialogue between people and land. The land provides resources that attracted settlers, who changed the land as they lived on it. Each place has an individual character, yet is part of something larger.

**Zoology**

Through their study of zoology, 4th Graders are introduced to the kingdom of nature closest to mankind and to the formal study of science. They begin by looking at the form of the human being, particularly the head, torso and limbs. Then they look at other animals and see the intimate connection of each to the environment where it is found and how it survives. Possibilities for study include cephalopods, rodents, carnivores, the avian kingdom, ungulates. The children write essays and poems and create and present individual projects about an animal of their choice.

**Visual Arts: Form Drawing, Painting**
In the Fourth Grade the focus is on braided forms, knots and simple geometric forms. These forms challenge students to use greater willpower in their thinking, as well as skill in their drawings, since they need to understand the flow of the lines behind other lines. In painting, all the previous work practiced with regard to soul mood now undergoes a metamorphosis: a change to a nature mood. Not only the primary and secondary colors but also darker earthly colors are needed to express the children’s newly awakened sensibilities. Motifs are taken from Norse myths, animal studies, and landscapes.

For the following subjects, see specific subject documents
- Music: Chorus, Recorder (C-Flute), Strings
- Foreign Languages: German, Spanish
- Physical Education: Games & Movement
- Eurythmy
- Handwork

**Grade 4 Student Learning Expectations**

**Language Arts**
- Understand the basics of paragraphing
- Identify parts of speech – verbs, prepositions, nouns, pronouns, adjectives, adverbs, articles and conjunctions
- Learn the meaning and use of synonyms and antonyms
- Retell the stories of Main Lesson
- Communicate clearly in many forms of writing (invitations, greeting cards, notes, friendly letters, journals, fliers and posters, poetry, informational writing)
- Correctly use three verb tenses
- Read at grade level in curriculum-related books
- Produce half of the writing in the Main Lesson books on their own (focus on descriptive writing)
- Learn to self-edit
- Master the grade-level spelling list

**Mathematics:**
- Master the times-tables (out-of-sequence, mixed tables)
- Consolidate computation skills of four operations including long multiplication and division
Understand and distinguish prime numbers from composite numbers
• Master factoring
• Understand the concepts of fractions (denominator and numerator, proper and improper fractions)
• Compare fractions (lowest common denominator)
• Apply the four operations with fractions
• Find averages
• Apply measurement
• Solve situation problems
• Understand basic concepts of area measurement

Local Geography and History
• Able to make simple maps
• Accurately read local and state maps
• Understand the relationship between the land and human lives
• Understand the characteristics and the history of the local area
• Understand the nature of the local area and the various peoples who live there

Zoology
• Understand and recognize different types of animals
• Identify the trait that specially developed in each animal
• Understand the relationship between the animals and their habitats
• Individually research an animal through books, discussions, and observations
• Create and present an artistic report
• Create a diorama of the animal and its habitat

Visual Arts: Form Drawing
• Develop a sense of balance and spatial awareness
• Develop hand-eye coordination
• Visualize a form and draw it onto the paper

Visual Arts: Painting
• Understand and create the various moods created by certain combinations of colors
• Understand color perspective
• Demonstrate proper handling of brushes, paints, and water
**Grade 4 Assessment**

- Observation by teacher during the lesson and class discussion
- Writing assignments
- Tests and quizzes
- Worksheets
- Oral assessments
- Presentations in class
- Drama performance
- Group and individual reading
- Individual research project
- Art works in portfolio and Main Lesson books

**Grade 5**

**Grade 5 Curriculum Overview**

Grade 5 is a year of balance, flexibility and harmony. It is often called the "Golden Age of Childhood" for it is a time when the children experience a special balance with their dawning inner life and a sense of lightness with their outward movement.

One might say that the mood of the 5th Graders is one of finding order and grace by actively seeking new ways to improve their habits, their work, and themselves. Fifth Graders have a dynamic interest in the world and they need to be inspired in an ennobled way; they thrive on goodness and beauty, seeking truth and striving to imbue their entire world with these virtues.

As a picture, the Fifth Grader is like a fine musical instrument that is beginning the process of being tuned. This is a slow and deliberate process, requiring rhythmic evaluations and direction, for the children easily stray onto divergent paths. As one string is being tuned, it is necessary to step back, recheck and see if the others are still in tune. Each individual finding balance results in a harmonious whole.

The Grade 5 curriculum traces the evolution of human consciousness through the millennia and across the globe, especially with respect to views of life, death and the afterlife. This helps the children to understand progress and change through time and helps them begin to take responsibility for their own learning and development. The common threads of the creation stories
and hero tales of the different civilizations, from floods and rainbows, to initiations and quests, to the intervention of the gods in human affairs, become evident. Through these threads is nurtured the children’s sense of viewing themselves as individuals, yet still as part of the big world.

A crowning moment of Grade 5 is participating in the Pentathlon where the children demonstrate their flow of movement in five athletic events of the original Olympic Games. The goal is not only to become athletically able but to demonstrate grace and beauty in all the events as well. The study of Greece follows the children from the world of mythology to history, a transition that reflects a growing interest and awareness of the world around them.

**Language Arts**

Writing is the foundation of virtually every subject that the students learn and the stories of the Main Lesson are used for composition writing. Much of our work is narrative or descriptive thus emphasis is given to outlining, basic compositional and poetical forms. This year the students review previous grammar work on synonyms, antonyms, homonyms, parts of speech, punctuation and phrases. They are introduced to subject, predicate, syntax, formal letter writing and to active and passive voice. The students practice writing using elements of a good composition such as unified paragraphs, subject-predicate agreement, verb tense agreement, the use of pronouns and identifying run-on sentences. They are encouraged to use the four types of sentences - statements, questions, exclamations and commands - in all their compositions. Many of their compositions are copied into their Main Lesson books. Some compositions include descriptive writing, persuasive, or narrative writing. Some of them are written from the point of view of the main character; others from the students’ own point of view. The students are asked to create artistic projects or write book reports on books they choose to read independently from the reading list.

Spelling rules continue to be explored as well as formal work on vocabulary including root words, prefixes and suffixes. Daily recitation of poetry and tongue twisters continue to be important facets of language arts.

The Main Lesson subjects continue to serve as a springboard for daily exercises in writing and reading and speaking. As students compose their own Main Lesson texts and write other types of work, attention is focused on introducing variety in sentence structure, moving from simple sentences to compound and complex sentences and using the appropriate punctuation for these sentence forms as well as for the integration of dialogue. The difference between using the active
and the passive voice, direct and indirect speech, is highlighted. Dictations serve to reinforce self-editing skills; illustrative texts serve to raise awareness around the variety of ways thoughts can be expressed.

Grammar lessons provide students with the background to enhance their own writing through a formal study of sentence forms, expanded work on paragraphing (expository, narrative, descriptive), and identification and review of common problem areas in writing such as homonyms, synonyms, and antonyms.

Reading continues to hold a central place in the Grade 5 language arts curriculum. Fifth Graders read for a variety of purposes: to seek information (biographies and nonfiction); to explore a particular author (author studies); to experience a variety of genres (mystery, historical fiction, humor, etc.), and for pleasure. Skills that are highlighted include: making book choices, reading aloud and silently, responding to literature orally and in writing, and figuring out the meaning of unfamiliar words through context clues or decoding.

In addition to reading books assigned in school, students will be expected to continue reading independently at home throughout the school year. Students may continue to enjoy reading aloud with parents and friends, and simple non-fiction reading may be encouraged. When students read books on their own, they meet with the teacher individually to retell the story, relate personal experiences to the story and discuss characters. Independent book reports will be assigned regularly.

Daily singing and recitations are linked to each block study, and include songs and poems from each studied civilization, or subject.

**Mathematics**

The Grade 5 curriculum moves from a review of fractions and mixed numbers to the world of decimals. The new material focuses on factoring, decimals, reading and writing decimal numbers, operations with decimal numbers, rounding decimal numbers, converting decimals to fractions and vice versa, further measurement of time, weight, linear measures, converting within the English system of measurement (example: yards to feet) and converting within the metric system (example: kilograms to grams). A variety of word problems using whole numbers, fractions and decimals
accompany the math practice lessons. To further strengthen their grasp of the basic arithmetic facts, students work daily with speed drills and mental math.

The students also continue to learn about basic geometrical figures. Considerable work is done with freehand geometry, working with the principles of division, area, and the relationships between number and form. Drawing of varying geometric shapes and divisions helps refine hand-eye coordination and spatial awareness. These exercises are a natural extension of our previous work with form drawing that eventually lead to the use of instruments and basic constructions which are fully explored in Grade 6.

History

History as the telling of mankind’s deeds and strivings is also an education of the children’s feelings. By learning about the mythologies and cultures of ancient peoples, students begin to understand the foundations of their own culture and way of life. In their study of ancient civilizations in a time-linear manner, the children are able to gain a sense of perspective. By immersing the children deeply in a feeling way in each civilization, the class teacher is able to lead the children to an intense experience of their own humanness.

Instead of focusing on facts and figures, the study of history requires inner mobility to enter sympathetically into these ancient states of being which are so different from our own. Through learning history the children expand their worldview and gain a wider understanding of themselves and others. History is brought before the children through stories in which intense pictures reveal not only the practical, but also the spiritual and emotional evolution of the world, thus speak to the children’s questions, emotions and perceptions of life.

The study of ancient history encompasses the cultures of India, Persia, Babylonia, Egypt and Greece and span a time period stretching from about 3000 BC to 300 BC. The children encounter this vast subject primarily through the mythologies of the great peoples that they study as they enter more documented times, they learn more of the architecture, sculptural and poetic achievements of ancient peoples.

Science: Botany

Botany, the study of plant life and its connection to the living earth, is introduced in its variety, beauty and wonder. The purity of the plant world strengthens the sense of wisdom, beauty and
goodness within the children. The students learn about the relationship of the plants to the earth and sun, how they change during the course of the year and how they differ around the world. They also learn that there is wisdom, order and structure in all that surrounds them in the natural world. They study the lower plants such as mosses, lichens, ferns and mushrooms, flowering plants such as the rose and the lily, pollination, metamorphosis, trees, bees and butterflies. Through looking at the plant world the children discover the vast variety of plant life, the conditions needed for growth and how the plants support the world of animals and humans in a variety of ecosystems.

Geography
This year the children study North American geography with its varied representations of the earth’s physical features. They observe the great contrasts between different geographical regions and learn about the human use of resources across the United States. The children experience the two great ranges of mountains on the continent - the Rockies and the Appalachians; the huge "breadbasket" of the Great Plains; and the flowing direction of the river systems. They also study the states and their capitals and draw many maps. Canada and Mexico may also be briefly explored.

Because geography is inseparable from history, students also learn about the native peoples, the pilgrims, explorers and pioneers. Each child is required to learn the names of the 50 states and their capitals and to locate most states on a blank map along with geographical regions and important rivers. Each 5th Grader writes a state or regional report independently and presents it orally to his or her classmates and parents.

Visual Arts
Woven throughout the year are artistic activities of various sorts: form drawing, painting, drawing, singing, speech and drama.

The focus in form drawing this year is primarily freehand geometry, working with the principles of division, and the relationships between number and form. Continued attention is paid to the organization of the form on the page and harmony of the finished drawing.

Painting is done once a week and the class as a whole works to develop certain techniques such as color blending, taking away of color and layering through veil painting.

The students continue to illustrate their Main Lesson pages with less copying and more original
work or, for some, looking at books for ideas of what to draw. The children learn techniques of working with colored pencils, oil and dry pastels. Accurate expression of exact observation rather than dissection is the goal of our activities in all disciplines from drawing and painting to descriptive writing and diagramming.

For the following subjects, see specific subject documents:
- Music
- Foreign Languages: German, Spanish
- Eurythmy
- Handwork

**Grade 5 Student Learning Expectations**

**Language Arts**
- Write complete thoughts
- Express main themes of a story
- Complete and organize a state report
- Complete book reports
- Retell stories in a Main Lesson Book
- Write letters
- Write responses to readings
- Write poetry
- Retain spelling words and use them correctly in compositions
- Spell assigned words correctly
- Find a word in a dictionary
- Spell words correctly based on hearing the word sounds or observing the letter sequence and noting its proper placement
- Alphabetize words by second and third letters
- Read silently
- Read aloud fluently and expressively
- Read for research purposes (state report)
- Read a variety of genres (mystery, humor, biography, fiction, non-fiction)
- Use correct punctuation and capitalization
- Edit simple mistakes
• Identify the eight parts of speech
• Correctly use active and passive voice
• Correctly use direct and indirect speech
• Identify prepositional phrases
• Write paragraphs
• Identify subject and predicate; synonyms, antonyms and homonyms; and prepositional phrases
• Identify and complete sentences in various forms - interrogative, declarative, expressive, and narrative
• Memorize verses and songs
• Articulate well with improved expression
• Participate in classroom conversations
• Strengthen the memory of lesson and/or story content
• Develop an understanding of genre such by working in different styles such as narrative, drama and reports supported by evidence
• Read, understand and follow directions
• Develop a variety of higher order reading skills such as understanding metaphor, determining a sequence of events and extracting the main ideas from narrative and factual accounts

Mathematics
• Solve word problems
• Comprehend place value through hundred millions
• Memorize the addition and subtraction facts
• Memorize the multiplication and division tables
• Add and subtract with carrying and borrowing
• Solve long multiplication and division problems
• Improve overall speed and accuracy with math problems
• Read fractions
• Compare fractions
• Know the equivalencies of a simple fraction
• Reduce and expand fractions
• Add and subtract fractions with like and unlike denominators
• Multiplication and division of fractions
• Convert improper fractions to mixed numbers
• Add and subtract mixed numbers
• Multiply and divide mixed numbers
• Understand the concept of decimals
• Add and subtract decimals
• Multiply and divide decimals
• Compare decimal numbers
• Round decimal numbers
• Identify and apply the appropriate measurement units
• Convert within English system of measurement
• Convert within the metric system
• Identify quadrilaterals and draw them freehand
• Identify three-dimensional shapes and draw them freehand
• Identify parts of a circle, angles, etc.
• Draw freehand increasingly complex forms
• Balance the form and space in drawings
• Transform form drawings

History
• Listen to and demonstrate comprehension of stories that embody aspects of life in the Ancient World
• Enter discussion in order to listen, to express ideas, opinions, and conclusions
• Learn new vocabulary
• Demonstrate comprehension of a variety of concepts such as cause and effect, comparing and contrasting
• Present information in different formats such as written form, graph, diagram, speech and map
• Engage in assigned activities such as craftwork and drama to extend understanding of a civilization
• Demonstrate an appreciation for cultural differences and similarities

Science: Botany
• Recognize differences between minerals and animals
• Understand the plant as a mediator in the world of nature
• Know and recognize the parts of the flowering plant
• Understand the processes of contraction and expansion; the growth of the plant from old seed to new seed; metamorphosis
• Understand the connections between plants, geography and climate
• Recognize plant growth from the equatorial tropics to the Arctic - from a tropical beach at sea level to the top of the mountains
• Know and recognize the plants in the local environment
• Be able to differentiate - Monocotyledons (grasses, grains) and the Dicotyledons (woody-stemmed, fruits) as a fundamental polarity in the plant world
• Be familiar with the lore of the flowers, grains and fruits in history
• Comprehend the differences among the lower and higher orders of plants: fungi, algae, ferns, seaweed, and their relationship to the flowering plants
• Recognize coniferous and deciduous trees, both in forests and in settled areas
• Know the oak and its many appearances in history and geography
• Know the types of wood and the uses made of trees
• Understand the issue of the disappearing forests
• Understand the relationship of insects to the plant kingdom, particularly ants, bees and butterflies

**Geography**
• Know the geographical features of the North American continent
• Understand how climate, altitude, soil and vegetation influence exploration and settlement
• Recognize polarities in geography: comparison of the Northeast and the Southwest; the Southeast and the Northwest
• Work effectively with maps, both reading and drawing
• Know the names and spellings of all states, provinces and capitals of North America
• Sing songs and recite poems connected to different cultural and economic regions of the United States
• Demonstrate understanding of the diversity of the social and economic life in North America

**Grade 5 Assessment**
• Weekly spelling tests and the occasional spelling bee
• Main Lesson Book
• Dictations
- Quizzes
- Independent writing on the presented material – weekly
- Independent research and projects
- Reading assessments
- Oral presentations
- Freehand map drawing
- Craft projects
- Bookwork
- Free rendering
- Creative writing related to subject
- Retelling a myth, legend or historic event
- Class Participation
- Math Sheet
- Mental arithmetic
- Oral math drills
- Independent bookwork
- Art work in portfolio and Main Lesson books
Middle Grades

Changes in methodology in grades 6 – 8
Upon reaching the 12th year, the child’s changing consciousness is met with an increased degree of rigor and an introduction to subjects and concepts that will slowly awaken their thinking. The task of the class teacher is to transition students from a dependence on the class teacher as guide to an active interest in the subject itself. To support this change student work often includes a higher degree of project-based learning and independent research leading towards the Eighth Grade projects.

Evaluation tools used in grades 6 – 8
Tools for assessment are listed for each grade and include tests, quizzes, presentations and other methodologies for academic evaluation.

Grade 6

Grade 6 Curriculum Overview
In Grade 6 students are on the threshold of a new developmental phase. The children say goodbye to a younger stage of childhood and greet a new paradigm, a decisive moment in their development. They now take initial steps toward regulating the swings of emotion that accompany the approach of adolescence. Structure and form in Grade 6 curriculum provide much-needed balance for the students’ polarities of feeling, e.g. joy and sorrow, calm and frustration, etc. The order provided in Grade 6 addresses the students’ newly emerging sense of self as they turn from looking outward into the world to looking inward and becoming more conscious of the two. Students begin the journey of forging their own path in life. This requires an adept discerning capacity which will eventually, from the age of about fourteen onwards, yield a strengthened capacity for thinking. At this time, however, the students’ evolving capacity for critical thinking is in the initial stages — the dawning intellect can be noted in their insightful answers and ability to truly understand cause and effect.

A sense of lawfulness permeates the Grade 6 curriculum. It is observed in such geometric constructions as the division of a circle. It is also recognized in the patterns of the night sky in
astronomy. It is present when studying sound, light, warmth and cold, and magnetism and electricity as conclusions are drawn from observable phenomena in the study of physics. It is observed in the Twelve Tables or laws of the ancient Roman civilization. In addition, it is seen in the upholding of the chivalrous code by the knights of the Medieval Ages.

**History: Ancient Rome and the Medieval Ages**

With blocks such as ancient Rome, the lawfulness so necessary at this Grade 6 developmental phase can be readily observed. In this ancient culture, law and order were essential, allowing the Romans to amass land that resulted in a mighty empire. The “letter of the law” was fervently upheld in an effort to maintain order and civility.

Picking up from the decline of Rome, a block of study carries on with the evolving feudal system and the knight’s code of honor as the students learn about the Middle Ages in Europe. The life of Mohammed and the cultural history of Islam are also explored along with the Crusades. During the Middle Ages, humanity’s relationship to the spiritual world shifted. Instead of a direct experience, faith replaced the old clairvoyance as the church and its leaders guided humanity by expressing the importance of believing — this faith would be the experience as this time period is also known as the Age of Faith or the Dark Ages. During this period, the saints and monks were the keepers of the “light” as their connection to the spiritual world shone a way for others to move forward. Those images translate to the soulscape of a Grade 6 students: that connection to the spiritual world as experienced when they were younger has now been grounded in their growing connection with the earthly realm. As their world shifts from what was without to what is within, from the spiritual to the earthly, they require the adult presence, upright Ego, to illuminate a way forward. Parents and teachers help to shine the light on their inner confusion, the chaos of the changes in themselves and their relationship to the world around them.

**Geography**

With the backdrop of ancient Rome and the Middle Ages, the children further penetrate the continent of Europe. By understanding the natural resources, the students learn how the land shaped the economic conditions of the people living there. Major rivers and mountain chains along with other dominant geographical features of the continent are explored with map drawing as an additional focus of the block. The study of geography or the ”earth’s writing” is significant as the students incarnate both into their physical bodies and as citizens of the world. The solidity of the
mountains and the low-lying plains along with the still lakes and flowing rivers are polarities that speak to the Sixth Graders as their emotional lives include the highs and lows of feelings that continuously ebb and flow.

Mathematics
Relating to mathematics, the form drawing and freehand geometric drawings done in the earlier grades are the predecessors to a geometry block in Grade 6. During this time, the focus is on the precise construction of geometric forms with the aid of a straightedge, ruler, and compass. The circle is the basis for many geometric forms. To freely engage in the form creation, the students initially learn the laws of geometric construction, including such fundamental constructions as copying a line segment; bisecting a line segment; dropping a perpendicular from a certain point to a line; erecting a perpendicular from a point on a line; bisecting an angle; and transferring an angle. With that foundation, the students segue to the six, twelve, and twenty-four divisions of a circle, along with other constructions such as nesting hexagons and stellar formations. These constructions truly meet the Sixth Graders' need for form, rules, and order as well as the necessity for expressing their individuality as noted in the color combinations chosen for each.

From barter to commerce, the value of money and the basic economics of buying and selling are explored during the study of business mathematics. Percentages are introduced. From that foundation, discount prices are calculated along with the commission earned from selling an item, the sales tax charged for a good, and the interest rate assessed on a loan granted for a car or home. In learning how money came into existence, the students explore how the value and worth of an item or service translates to the value of a person as well as a community. These value/worth/compensation points are important connections for the students to make during this time of transition to the threshold of adolescence and the shifting of attention to peer approval and the impact that can have on self-acceptance, etc.

Science: Astronomy, Physics, Mineralogy
Following the geometry block and the cosmic origin of the circle, the students, who as twelve-year-olds are standing firmly on the earth, are ready to begin a study of the heavens. The Sixth Graders become aware of the rhythmic movements of the sun, moon, and stars. As each student becomes more conscious of the destiny path he or she is traveling, attention is drawn to the heavens to track patterns and movement. Such patterns are reassuring to the students during this time of physical
and emotional growth and change. The relationship between the realm of the skies and the season of the year is also noted by the Sixth Graders in seasonal festivals.

Sixth Graders are now learning to observe and translate their observations. To enhance their study of celestial geography, the students track the night sky for a period of weeks. This homework assignment can be a pivotal one as the observations feed discussion of the students’ conclusions about the movement of the stars at the equator and the Poles. It is so important for Sixth Graders to observe and, out of their own experience and discernment of the phenomena, note what is actually happening from a particular latitude and longitude. The gift of observing, thinking through those observations, and arriving at particular truths based on accurately reflecting upon the phenomena serve the student, and evolving human being, on his or her life’s journey.

Physics studies begin in Grade 6 and continue through High School. The students observe physical phenomena relating to acoustics, light, warmth and cold, magnetism and electricity, and are asked to draw conclusions. Studying physics in this way helps the students to deepen their interest in the world around them and come to better understand the phenomena that exist in our world. Observing and then drawing conclusions based on those observations are important steps in developing the intellect. This growing objectivity is also an important skill in the social realm.

With the study of astronomy and mineralogy or geology, the resulting polarities reflect the developing Sixth Grader. The mineralogy block can commence by sharing the solidity of the earth, which is contrasted with the constant change (e.g. mountains building up, volcanoes erupting, earthquakes shuddering, etc.) that takes place within the Earth’s crust. The students can then segue to an introduction of mountains (fault, fold, and volcanic). They also study the various kinds of rocks and formative forces acting on each.

**Visual Arts: Painting**

The use of color extends beyond Main Lesson book drawings. Details are emphasized and proportions are cultivated to enhance the form and color blending done using an assortment of colored pencils. Color and its blending is emphasized in weekly painting lessons. Students find the form in the blending of colors and pull out essential details using techniques cultivated in Grades 1-5. The curriculum provides many landscapes and character scenes as subjects. Students continue with wet-on-wet watercolor paintings and extend to a new technique of wet on dry. Further
observation skills are called forth and strengthened as color is layered, providing a textured quality to the painting work done.

For the following subjects, see specific subject documents:

- Music: Chorus, Orchestra/Band, Music Instruction
- Foreign Languages: Spanish and German
- Practical Arts: Handwork and Woodwork
- Eurythmy
- Physical Education: Games and Movement

Grade 6 Student Learning Expectations

Language Arts

- Create a story by expressing main themes and sequencing the story ideas with the appropriate transitions
- Enhance the details of the story while maintaining the essence
- Vary the sentence structure (declarative, interrogative, exclamatory, and imperative)
- Understand punctuation and capitalization
- Edit work independently
- Continue to work with the narrative style of writing and receive an introduction to the expository style
- Self-generate written work
- Enhance auditory skills through writing dictations
- Read aloud fluently and with expression
- Comprehend what is read
- Spell words correctly based on hearing the word sounds or observing the letter sequence and noting its proper placement
- Retain word meaning and spelling in subsequent compositions
- Use a dictionary to aid in the spelling process
- Understand the nine parts of speech along with the review of various grammar concepts such as active and passive voice, indirect and direct object, and direct and indirect speech. Other concepts introduced include perfect tenses and the subjunctive mood.
- Speak and recite with proper articulation and expressiveness
- Root words, prefixes, suffixes and word origins (especially Latin roots)
Mathematics

- Learn, retain and utilize math facts in mental or written math
- Correctly use fundamental math operations of addition, subtraction, multiplication, and addition
- Understand and apply the order of operations
- Work with and solve word problems
- Understand whole numbers and decimal conversions
- Apply the four operations with fractions and decimals
- Apply percentages and conversion to fractions or decimals
- Understand and apply factors and factorization
- Understand and apply geometrical instruments, basic geometric constructions and geometrical terms
- Construct various geometrical forms
- Understand graphs (bar, line, and pie)
- Understand introduction to coordinate plane geometry
- Ratio
- Proportion
- Find the interest, principal and rate (the use of formulas)
- Solve problems involving discount, simple interest, commission
- Perimeter and area of two dimensional regular shapes (the use of formulas)
- Missing numbers in simple operations

History

- Understand chronological sequence of events and how one event impacts a subsequent one
- Recognize the gifts each civilization has to offer the next and what can be learned in terms of what can be preserved and what can be transformed
- Continue to work with map making, utilizing accurate spatial organization and orientation
- Correctly read maps

Geography

- Understand the relationship of the land to resulting human activity
- Master map making, utilizing accurate spatial organization and orientation
• Correctly read maps
• Demonstrate understanding of the relationships among geographical areas, the people who live there and the culture that has evolved

Science: Astronomy, Physics, Mineralogy
• Accurately observe phenomena and discern what is revealed, drawing plausible conclusions. Particular phenomena involve acoustics, light, temperature, magnetism and electricity
• Effectively use expository writing to accurately record experiments, noting materials used, procedure followed, observations made, and conclusions drawn
• Accurately track patterns and movements in the night sky and apply facts and one’s own observations to understand the patterns and movement of the stars at the equator or the Poles
• Understand of the solidity of the earth and its movements (e.g. mountain building, volcanoes, earthquakes, etc.) and the various kinds of rocks and the formative forces acting on each

Visual Arts: Drawing and Painting
• Accurately draw forms and maintain proportion on the page and with other elements on the page
• Blend color; utilize bold and light to enhance the forms; maintain forms that result
• Paint using a wet-on-wet or wet on dry method of painting
• Recognize the gesture of each color and the interplay of form, mood, etc. that results
• Demonstrate proper care of all materials

Grade 6 Assessment
• Observation by teacher during the Main Lesson, class discussion, and language arts and math practice classes
• Writing assignments
• Tests and quizzes
• Drama performance
• Class speech work
• Dictations
• Research project and presentation
• Independent reading
• Written math assignments and practice work
Formation of a business: practical application of economics and business math themes

Written and artistic expression in Main Lesson pages

Map work

Art works in portfolio, projects, and Main Lesson books

Grade 7

Grade 7 Curriculum Overview
Seventh Grade is a year of exploration, awakening and discovery. The students of this age are experiencing a profound developmental stage that finds them stepping on the bridge from late childhood to young adulthood. They are rising into their self-hood finding a new relationship to their world and themselves. The student is maturing, yet not fully engaged with that maturity. Seventh Graders often feel strongly that they are no longer children, but neither are they fully capable of holding onto their new elusive maturity. Seventh Graders can feel emotionally adrift at times, and usually turn to each other for guidance and support, while the teacher can become somewhat of an afterthought but it is the curriculum that will meet them best.

In Grade 7 the student’s vibrant feeling life is deeply met with a rich panoramic curriculum that feeds that desire to learn. The student’s doubt and resistance towards authority is reflected in the history/language arts lessons that encompass the Renaissance to the Reformation. In the Perspective Drawing block the students discover a way to bring math and art together in a beautiful way. The joy of discovery is linked to history with the study of inspiring biographies such as Joan of Arc, Eleanor of Aquitaine and the Renaissance artists. Students are inspired to improve, gain confidence, and reach into the unknown like the people from the Age of Exploration whose drive and determination can seem familiar to a 7th Grader. Such vivid history grab their attention and facilitates their study of geography. The 7th Grader often studies both European and South American geography through the adventurous Age of Exploration.

While their feeling-life is met through history and biographies, the physical-nature is met working in the sciences. With the introduction of chemistry and lessons on understanding fire and cycles of chemistry helps the students understand their own inner fire and changing selves. The science curriculum of physics is also expanded from the previous year. With hands-on study of levers and simple machines the student is connected to the physical world and anchors the concepts of
observation, cause and effect. The exploration aspect also turns inward as the students learn about their own physical nature through the study of human physiology, specifically the systems and cycles of the body.

As math skills are further developed the students' confidence and attitude towards learning are strengthened. This is also the case for language arts, where the students strengthen language skills in the creative writing block while still keeping that feeling life involved. The pedagogical aspects of the Wish, Wonder, and Surprise block bring consciousness to complex concepts like materialism, continuity of thinking, and can include aspects of social challenges. Throughout this journey of discovery there is an attempt to raise the drive and thinking of the students to reach further in all aspects of what they do and how they act.

**Language Arts**
Writing is the foundation of virtually every subject that the students study. Work with language arts is woven into all aspects of the main lesson content and bookwork. In Grade 7 the students take their writing skill to the next logical level expanding on past years' lessons. Advanced focus on proofreading and simple editing are manifested through their work on drafts. Further advancement is made through their writing using elements of idea, style, structure and clarity. Students develop a new appreciation for “good writing” and an interest in the editing process as their capacity to discern stylistic features and mechanical errors grows and as they learn to make corrections and adjustments. Seventh grade lessons in language arts include analyzing compositions. At the teacher’s direction dictation and workbook exercises might be utilized along with spelling lists. Grade 7 literature studies includes books assigned by the teacher. During class discussion time on literature, students are often asked to reflect on what has been discovered and learned. The focus of these studies is to help the student learn to summarize important sections, explain relevance of certain passages, identify specific literary devices an author uses to involve readers, identify author’s purpose and point of view, formulate and defend opinions about what they have read, as well as to make connections between their own lives and the characters, events, and circumstances represented in various works. The continuation of these conversations also enhances their speech work.

**Mathematics**
The Grade 7 curriculum moves from the final review of all math concepts introduced so far to
having students explore geometry more deeply. Mathematical drawing continues and proofs for geometric forms are taught. As the students have entered a more abstract way of thinking and looking at the world they are also introduced to pre-algebra, usually through the continuation of split classes and smaller teacher student ratios to facilitate learning. New concepts include:
expanded work with percent with area; perimeter and area of polygons; introduction to powers and roots; bases; scientific notation; signed numbers; elementary statistical notions (mean, mode, median); basic algebra concepts; and the introduction of probability and statistics.

History
In Grade 7 the students experience the lessons that continue the timeline from the Late Middle Ages and into the Renaissance. The students learn about the culture, living conditions, the political class systems of those times, and consider the events of that era that took place in the light of civilization as we know it today. The Age of Exploration is the core of the history lessons and various explorers and expeditions are chosen by the teacher. The Renaissance is covered in these lessons, which is explored through art, people, science and historic events that lead up to and possibly include the Reformation.

Science: Physics, Physiology, Chemistry
Physics: In Grade 7 the comparative observation based approach takes on a new direction, towards technical applications in life of mechanics. Students work with simple mechanical theories involving the use of levers.

Physiology: Through all studies the human being remains the center; the Physiology block allows students to see how the human body works through lessons on the systems of the body. Reproductive, respiratory, circulatory, nerve/sense, and metabolic systems are the focus. Other areas of exploration can include studies about the eye and ear and hand-eye coordination.

Chemistry: In Grade 7 we begin the rudimentary study of chemistry, based on experiments and observations of life and matter. Students are introduced to the four elements (water, fire, air and earth) as related to the early exploration of these subjects in history; combustion and its properties; phosphorus, sulphur and carbon; acids and bases, salts and finally limestone and the lime cycle. Water is looked at in more depth, which includes the processes of evaporation condensation, expansion/contraction, and circulation.
Geography
Seventh Graders study the two hemispheres, latitudes, longitudes, discoveries of the explorers in the Age of Exploration and the cartography that expanded during that time. Focusing in depth on South America, both its geography and the importance of its discovery by European explorers. Teachers often include a way to connect the current political status of South America to the lessons as well.

Visual Arts
Woven throughout the year are artistic activities of various sorts: painting, drawing, singing, speech and drama. Continued attention is paid to the organization of art along with studies of style and form from the Renaissance artists. Art lessons are part of the Main Lesson, but can also be included as an independent lesson. The class as a whole works to develop certain techniques that often include charcoal drawing, sketching, use of color blending, taking away of color and layering through veil painting.

The students continue to illustrate their Main Lesson pages with less copying and more original work or, for some, looking at books for ideas of what to draw. The children continue to learn techniques of working with pencils and chalk pastels. Accurate expression of exact observation rather than dissection is the goal of our activities in all disciplines from drawing and painting to descriptive writing and diagramming.

For the following subjects, see specific subject documents:
• Music
• Foreign Languages: German, Spanish
• Eurythmy
• Handwork

Grade 7 Student Learning Expectations
Language Arts
• Know all rules related to capitalization and punctuation
• Learn to identify common structural errors in sentence writing
• Be able to differentiate mood (indicative, imperative, subjunctive) voice passive, active
• Identify figures of speech
• Routinely take effective notes in class
• Be able to write different styles in short stories, three-paragraph essays, journals, etc.
• Accurately diagram sentences
• Identify all major verb tenses: Present, Present Continuous, Simple Past, Present Perfect, Past Perfect, Past Continuous, Future
• Differentiate Mood (indicative, imperative, subjunctive); Voice (Active, Passive)
• Become familiar with various forms of writing: Introduction to business letter writing; continued practice with main lesson retellings; descriptive pieces; reading responses; journaling; poetry; short stories; autobiographical narratives; persuasive arguments; editorials
• Learn to study poetry: analysis of poetic forms, devices, meaning
• Identify figures of speech (metaphors, similes, hyperbole, personification)
• Identify literary themes
• Be able to discuss character and plot development, author's style and purpose, literary techniques; Be able to read for detail
• Be able to read from major newspapers & magazines (opinion vs. fact)
• Carefully maintain homework notebook based on individual student’s need
• Submit assignments in the form requested
• Able to pace and plan steps for long-term assignments
• Be accountable with regard to assignment deadlines
• Perform basic word processing

Mathematics
• Use percentage to name values
• Use ratio to compare quantities
• Use prime factorization to find GCD and LCD
• Identify patterns and relationships using graphs and tables
• Expand use of graphs to describe statistics
• Multiply, add, subtract and divide negative numbers
• Express numbers using negative component
• Estimate sums and products involving percent
• Evaluate algebraic expression
• Find perimeter of polygon, rectangle, square etc
• Find areas of polygon and circle and combination of both using formula
• Apply Pythagorean Theorem
• Make generalizations by observing relationships among numbers
• Be able to create mathematical problems (they need to have an understanding of the rule and theorem)
• Use radical form to express square roots of whole numbers
• Use percentage to name values
• Use ratio to compare quantities
• Use prime factorization to find GCF and LCD
• Identify patterns and relationships using tables, graphs, and rules
• Expand use of graphs to describe statistical relationships
• Evaluate probabilities of events and find all combinations of arrangements involving certain number of variables
• Express numbers using negative exponents
• Find what percent one number is of another
• Find a number when just a percent is given
• Write numbers in standard form and scientific notation
• Compute large numbers using scientific notation
• Use proportion to describe relationships and solve equations
• Estimate sums and products involving percents
• Multiply and divide using exponents
• Evaluate algebraic expressions
• Use both English Standard and Metric System
• Find areas of parallelograms and trapezoids
• Find surface area and volume of a variety of shapes
• Use formula to convert between English and metric measures
• Find area of polygons and circles and combinations of both, using basic formulas
• Recognize and apply properties of symmetry; similar and congruent figures

Science
• Understand all mechanics introduced and how to apply them in life
• Demonstrate ability to construct a mechanical device based on the knowledge acquired from Main Lesson
• Understand all technical applications of mechanics learned in class
• Master the characteristics and functions of the reproductive, respiratory, circulatory, nervous...
and metabolic system and be able to identify them in the human body
• Know the function of the major organs
• Know the importance of what it means to be human
• Know the lime cycle and all its components
• Recognize the components involved in and the products of combustion
• Correctly present an experiment within the parameters given
• Know the scientific language of chemistry
• Know the rules of the experiments, what to never do, how to prevent a dangerous situation

History
Understand the following periods of history: the Age of Exploration; the Renaissance and its art; and the Reformation

Geography
• Identify all countries, major cities and major cultures of South America
• Understand the importance of the discovery of South America
• Know the rivers, mountains and mountain regions, and lakes of South America and how they influenced the culture
• Know the vegetation and animal life of South America

Grade 7 Assessment
• Main Lesson books
• Papers
• Tests, quizzes, pop quizzes
• Worksheets
• Independent projects
• Research presentation
• Student demonstrations
• Illustrations
• Book work
• Individual work with student
• Class group activities related to the lesson
• Observation by teacher during the lesson, class discussion and hands-on activities
Grade 8

Grade 8 Curriculum Overview
Grade 8 may be summed up as a year of polarities. Virtually everything studied is approached from at least two perspectives, which leads the students to see for themselves that there may be two answers for any one problem, two sides to any one issue and that shades of gray exist throughout history. In algebra that students learn that even a math problem may have two completely different and perfectly correct answers. This emphasis on duality arises as the curriculum tries to meet, nourish, and balance the powerful polarizing forces in the 8th grader, such as sympathy and antipathy, joy and sorrow, love and hate, good and evil, contraction and relaxation, etc. Whether lessons are exploring the complexities of history from Reformation to Revolution, or spiraling in from infinite to the tiniest point in Geometry, plumbing the mysteries of how opposites attract in magnetism, or what positive and negative means in electricity, the theme of polarities and balance will be of central importance.

As a picture, the Eighth grader is at the precipice of the unknown. The future is hurtling towards them and they are grasping with being ready to meet it and find their own path ahead. As such, students of this age are often drawn together with the strength similar to powerful magnets and yet are also trying hard to be recognized as individuals, which include specific talent and challenges. This is often the year of reckoning as skills and understanding of all elementary concepts are solidified through the extensive curriculum and lessons of the Eighth Grade.

Language Arts
Working with vocabulary, speech, and literature continues as in Grade 7. In literature, the students read Shakespeare and often perform a Shakespeare play. Focus is placed on deepening of reading comprehension; increasing vocabulary through reading; extensive work with a thesaurus and dictionary. Poetry and literature that are language- and history-rich are read. Teachers can utilize a wide variety of poetry, reading assignments and writing lessons, to assist in their lessons. Students usually study the historical documents that changed the course of humankind. These might include the Rights of Man or the Declaration of Independence. In writing, the focus is towards the composition of a five-paragraph expository essay, which develops a thesis statement clearly formulated in the
introductory paragraph. Students learn to choose a focus, write a thesis statement, transition into succeeding paragraphs, and formulate a strong conclusion. Different types of essay forms are also explored. Also addressed are increased polishing of narrative writing; writing with detail and precision; control and grace of expression; summarizing; persuasive writing; figures of speech, and introduction to basic poetic forms and style. Students this year have their first experience with more in-depth research work and report writing with “personal entries” or “independent studies” within each Main Lesson block. How this is done is left to the discretion of the teacher but are often the subject of personal interest to the student, which helps them relate to the block lesson but which has not been covered in a presentation by the teacher. During the block on meteorology, for example, students may choose to research and compose a personal entry on El Nino, hurricanes, or the ozone layer. While these independent entries are not usually long, the student uses two or more reference sources and provides a bibliography. In grammar, students undergo a general and continuous review of all previous work, including parts of speech; elements of punctuation; phrases and clauses, verb and pronoun agreement; passive and active voice; and figures of speech (metaphor, simile, image, symbol, personification.)

Mathematics
At this age, powers of judgment are awoken and the focus is on Algebra. Lessons are taught by a math specialist and focus on all algebraic calculations. With extensive practice as part of the program, students gain experience in formulating mathematical expressions and a feel for correct procedure. The teacher leads them little by little to more difficult problems in which they learn to deal with powers, roots, brackets and fractions in connection with negative numbers. Depending on the skill level, students are also introduced to working with polynomials, graphing, and challenging logic and word problems.

History: 1700 to present
Grade 8 delves into the perception that all humans should be equal under the law and in their culture, ideas that were intellectually established in the Age of Enlightenment and beginning with the willful French Revolution to be realized in practice. Lessons are given following the parallel historic streams found in North America, which focus on the ideas of universal human rights, the struggles for independence and the formation of the United States of America are also covered. The students are introduced to the Industrial Revolution, the complete change of living conditions in the industrialized countries, and the resulting social questions which have not been solved to the
present day. Historic themes and polarities are often covered through the study of each age. Everything from the American Civil War, development of modern America, and the subsequent world wars, and modern day conflicts are studied this year.

Science: Physics, Organic Chemistry, Physiology
Physics: In Grade 8 the physics lessons expand upon all previous physics work with the addition of lessons on fluid mechanics, hydraulics, vacuums, pressure, meteorology, electromagnetism, the internal combustion engine, and the electric motor.

Organic Chemistry: The simple concepts of chemistry that were introduced in Grade 7 are developed further and the students learn about the foundations of nutrition through the lessons on carbohydrates, starches, sugars, and fats. Industrial processes are also connected with chemistry. The students conduct as many experiments as possible focusing on laboratory skills, safety, and quantitative observations.

Physiology: In Grade 8 the mechanics and remaining dynamics of the human body are studied, along with consideration of how the laws of physics affects the human being. Students learn about the mechanics of bones and muscles; the Golden Mean as a ratio in the human body; the inner construction and mechanism of the eye (if not done in 7th); the inner construction of the ear and larynx (if not done in 7th); and the fundamentals of procreation.

World Geography: Asia, Australia, Oceania, and Antarctica
Geography can serve to bring a unity into the other lessons, especially history. Special attention is given to all remaining geographical content not covered so far. Special cultural achievements of individual nations are studied. Geography also includes the study of the oceans, weather and the globally connecting study of climatology and how it currently is affecting each continent.

Visual Arts: Drawing, Veil Painting
Students draw objects that are spatially graphic, and use contour, perspective and shadows. They copy a complete drawing of a master. Students expand their techniques in veil painting and all other areas of visual arts.

For the following subjects, see specific subject documents:
• Music
• Foreign Languages: Spanish and/or German
• Physical Education: Games, Movement
• Eurythmy
• Practical Arts

Grade 8 Student Learning Expectations

Language Arts
• Learn assigned vocabulary
• Demonstrate reading comprehension at grade level
• Master the use of the thesaurus and dictionary
• Understand roots and prefixes
• Effectively organize sentences and paragraphs
• Demonstrate ability to write with detail and precision
• Demonstrate increasing control and grace of expression in writing
• Demonstrate increased ability to summarize
• Understand basic poetic forms and poetics
• Understand and distinguish among figures of speech: image, simile, metaphor, personification
• Know parts of speech
• Know elements of punctuation
• Recognize and properly utilize phrases and clauses
• Properly express verb and pronoun agreement
• Understand and correctly use the passive and active voices
• Recite poems with accuracy and expression
• Prepare and deliver oral presentations
• Participate in a Class Play according to expectations

Mathematics
• Demonstrate proficiency in solving range of percent problems
• Demonstrate proficiency in operations with negative numbers
• Demonstrate proficiency in computation using signed numbers
• Demonstrate proficiency in measurement of area of variety of shapes
• Demonstrate proficiency in measurement of surface area of variety of shapes
• Demonstrate proficiency in measurement of volume of variety of shapes
• Demonstrate proficiency with percent, ratios and proportions, and business math
• Demonstrate proficiency in algebra, probability and statistics, and geometry
• Demonstrate proficiency in graphing and functions, polynomials
• Differentiate among whole numbers, integers, rational & irrational numbers
• Order and compare integers and rational numbers
• Recognize and extend geometric sequences
• Define and recognize various properties to serve as reference points
• Write numbers in standard form and scientific notation
• Find products and quotients of numbers expressed in scientific notation
• Determine unit rates using ratio
• Use proportions to describe relationships and solve equations
• Use proportion to solve problems involving percents
• Solve problems involving percent of increase or decrease
• Solve problems involving weighted average, mixtures, and uniform motion
• Solve problems involving discount, simple and compound interest, commission
• Use number line to graph, compare, and find the absolute value of numbers
• Use order of operations to simplify and evaluate numerical and algebraic expressions
• Use distributive, commutative, and associative properties to simplify expressions
• Use properties of equality and formulas to solve equations and inequalities
• Translate word phrases into algebraic expressions and word sentences into equations
• Solve open sentences
• Solve equations using inverse operations
• Solve linear equations and inequalities
• Solve problems with integers and rational numbers using four operations
• Solve problems that have negative exponents in expressions
• Solve equations that contain more than one variable
• Solve equations and inequalities that involve more than one operation
• Use tables and graphs to represent relations and functions
• Name and graph ordered pairs
• Find solutions for relations with two variables and graph the solution
• Find the slope of a line
• Graph linear equations using the x and y intercepts or the slope and y-intercept
• Solve systems of linear equations by graphing
• Graph linear inequalities
• Identify and classify polynomials
• Find the degree of polynomials
• Add and subtract polynomials
• Solve problems involving monomials
• Factor monomials
• Simplify expressions
• Multiply a polynomial by a monomial
• Simplify expressions involving polynomials
• Multiply two binomials
• Factor polynomial
• Solve polynomial equations
• Compute surface area and volume of spheres and cones
• Find areas of parallelograms, triangles, and trapezoids
• Finds surface area and volume of prisms, cylinders, spheres, and pyramids
• Find the missing angle measures of a triangle, similar triangles, quadrilaterals
• Determine the sum of the measures and exterior angles of a polygon
• Find missing sides and angles in triangles using sine, cosine, and tangent ratios
• Identify the relationships of vertical, adjacent and complementary angle
• Display and interpret data in stem and leaf plots
• Use measures of variation to compare data
• Use tree diagrams to count outcomes
• Find the odds of a simple event
• Find the probability of independent and dependent events
• Explore and use permutations and combinations
• Use measures of variation to compare data

World Geography
• Demonstrate ability to draw and interpret maps
• Correctly identify topographical features
• Correctly identify capitals, countries, rivers, mountains, lakes, cultures, languages as assigned
• Know the natural resources of the countries studied and understand their importance
• Understand the economics and politics of countries studied

Science
• Understand the relationship between tone and number in acoustics
• Understand the expansion of different kinds of bodies through warmth
• Understand the workings of hydraulic press and pumps
• Understand high and low in meteorology
• Understand the workings of the electric bell and the telegraph
• Understand the workings of relay switches technology
• Build an electric motor
• Understand the properties and role of starch
• Understand the properties and role of sugar
• Understand the properties and role of fats and oils
• Understand the properties and role of cellulose
• Understand the properties and role of protein
• Demonstrate ability to build an alcohol burner
• Understand the mechanics of bones and muscles
• Understand the Golden Mean as a ratio in the human body
• Understand the inner construction and mechanism of the eye
• Understand the inner construction of the ear and larynx
• Understand the process of procreation

History
• Understand the following periods of history:
  ◦ Absolutism, the French Revolution, the Industrial Revolution, American Revolution, American Civil War and World War I and II
• Demonstrate widening perspective on events through knowledge of history
• Demonstrate understanding of how human consciousness develops through history
• Demonstrate developing social and cultural awareness

Visual Arts
• Draw objects that are spatially graphic
• Demonstrate techniques of using contour, perspective and shadows
Successfully copy a complete drawing of a master
Demonstrate mastery of the basic techniques of veil painting

**Grade 8 Assessment**
- Observation by teacher during the lesson, class discussion and hands-on activities
- Book work
- Editorial and essay writing, journals
- Performance in drama
- Math worksheets
- Class work – math word problems
- Homework
- Main Lesson books
- Interpretation of maps
- Identification of topographical, etc. particulars
- Tests & quizzes
- Projects
- Oral and written reports on the experiments
- Observation by teacher during experiments
- Observation by teacher of execution of artwork
- Art works in portfolio and Main Lesson books
- Written narratives on class presentation
- Creative writing based on historical facts
- Timelines with major events
- Researching and writing biographies

**High School**

General Pedagogical Overview

**High School**

**Characteristics of this stage of development**

The adolescent has reached a stage of development in which the individual sense of self is emerging in relation to a growing intellect and search for truth. As teenagers mature inwardly, they also grow...
socially. The teenage years are a time when adolescents hone their powers of judgment and seek to align their inner ideals with truths they experience in nature and culture. During this period, adolescents crave strong sense impressions, actively test limits, and seek truthful answers to questions of destiny and purpose. They need experiences that exercise their growing intellect, imagination and physical and emotional bodies, and expand capacities for personal and social involvement. As adolescents refine and strengthen their self-confidence, they gain control over their impulses and are better able to direct their will and find balance in their emotional life.

Initially, the adolescent swings between strong social and personal polarities that can foster feelings of anxiety, alienation, and impulsiveness in action and thought. However, if they are met with clear ideals, objectivity, beauty, and positivity, adolescents can find balance between extreme polarities. As periods of balanced thinking and feeling grow, the teenager’s self-confidence expands along with a growing capacity for personal and social involvement in the world. By encouraging and promoting a social culture that embraces every individual, guides by principles of tolerance, compassion, and understanding, the Waldorf High School provides a structure and a sense of security through the unsure stages of adolescent self development.

Educational principles that guide the methodology during this stage of development

A Waldorf High School is unique in that it strives to meet young people at their particular stage of soul development through both the curriculum and pedagogy. Curriculum content is chosen to mirror the inner and outer struggles of the adolescent at each stage of intellectual, social and emotional growth. The content, when fully experienced, provides them with wisdom needed for maturing these capacities while nourishing the individual’s soul life. When the educational material is brought in a way that students feel challenged intellectually, their feelings are touched, and they have the opportunity to form their own relationship to the content. Through creative work in the physical realm, adolescents can experience a deep and free relationship to their education and individual development over a lifetime.

Anticipated outcomes at the completion of this phase of schooling

Ultimately, Waldorf education aims to bring adolescents into creative relationship with their own intellectual, artistic and physical pursuits so that they may become life-long learners, using their skills and knowledge artistically, in the service of a better world. Waldorf graduates have worked to find balance in their capacity for clear thinking, controlled feeling, and well-considered action. They have developed a healthy, independent soul life and enter into adulthood with a growing
sense of their own strengths, challenges and skills. At a deep level, Waldorf students understand that knowing oneself is a key to experiencing freedom in thought, feeling and action. This self-knowledge enables the individual to retain creative authorship over his or her own life.

Evaluation tools used
Students in the High School are evaluated in a variety of different ways; the High school faculty also employs means of evaluation that help measure our ability to achieve educational and pedagogical goals. In academic courses, all teachers create syllabi that explicitly state how the students will be assessed. Grading rubrics relate measurement guidelines and the weights of specific quizzes, tests, daily performance, activities and projects. Even in courses that are measured on a Pass/Fail basis, each course syllabus delineates the criteria for succeeding in that class. Course grades are awarded on a letter system (A, B, C, D, F) that corresponds to a 100 point numeric system.

Because a Waldorf school has educational aims in the social/spiritual realm that are less easy to measure, we have a number of checks and balances in place to assess the individual growth and overall social health of the student through the High School years. Due to our small school size and class size, we are able to observe each student’s social and personal growth on a daily basis. The faculty makes time weekly to discuss pertinent observations at faculty meetings and make plans as necessary. Each student in the High School has a Faculty Advisor who is charged with monitoring and overseeing the advisee’s academic, social and individual well-being and growth. Additionally, each grade has two faculty Class Sponsors who monitor and work with the social health of the class, work together with the students on issues that arise within the school, and plan for class needs. Class Sponsors also serve as an important link to parents as organizers of parent education and communication. Twice yearly, parent-teacher evenings are held in which every parent has access to every teacher to discuss issues and concerns about the adolescent. Parents may also, at any time, request a meeting of concern with Faculty or Administration.

Grade 9

Grade 9 Curriculum Overview
The Grade 9 student is embarking on the third seven-year phase of human development. Rudolf Steiner once described the feeling life of the teenager at this stage as being “akin to having been
‘spat out’ of the spiritual world.” The emotional life can be in turmoil at this age. The individual is undergoing tremendous changes, physically, emotionally, intellectually, and existentially. Extreme moods are common. Discrepancies between intellectual ability and emotional stability can be experienced. Likewise discrepancies between ideals and action often arise. The Waldorf curriculum seeks to nurture the balanced development of the student by meeting the inner soul needs of the individual. Emphasis is placed on the physical aspects of the world.

In History individuals who have had significant impact on the world are studied. The power of the idea and the strength of mind of individuals are inspiring for the student of this age trying to find a place in the confusing world. Also through the historical lens, the development of Western art is followed. This enables the student to comprehend that consciousness has developed over time. Different viewpoints existed in the past and these have been expressed in each age by the art from those times.

In Life and Earth Sciences the structure of the human body and the physical body of the Earth are studied. This work helps the 9th Graders to find their home in the physical realm in themselves and on the Earth. In the physical sciences particular attention is paid to the method of learning. The students are encouraged to learn keen observational skills and to develop careful and thorough ways of distilling the laws that hide within the presented phenomena.

The 9th Grader is encouraged to explore polarities: in Physics the duality of hot and cold is investigated; and the Comedy and Tragedy block is another opportunity to live into polarities. In Black and White Drawing the students practice finding the balance between the dark and the light.

The Grade 9 Main Lesson blocks are Comedy and Tragedy; Voices of Liberty; Spirit of Enterprise;; Dynamic Earth; Anatomy and Physiology; Thermodynamics; Organic Chemistry; Sustainability; Probability; History through Art. Academic track classes include English 1 and United States History, which alternate throughout the year; Spanish 2; and Mathematics (Algebra 1 or Geometry).

Grade 10

Grade 10 Curriculum Overview
Thematically, Grade 10 is the year of discovery of transitions and metamorphosis. After experiencing the extremes and polarities of Grade 9, students are prepared to recognize that unity
between opposites can be realized if one is conscious of the points of transition. This recognition is made possible by the growing intellect and it is a skill that serves the 10th Grader’s academic and social growth. The 10th Grader’s brain has almost attained its full power. The students are developing better reasoning skills, as their ability to hold back judgment, listen and observe more carefully grows. Where a 9th Grader may cling to unsupported biases and be prone to snap judgments that are hard to shake, the 10th Grader’s thinking is becoming more focused and reflective. This new intellectual power helps them to find balance in the unstable emotional realm of sympathies and antipathies and better able use logic to analyze that which can be understood through thought. The students are able to compare, contrast, analyze and synthesize information and are often eager to take up philosophical questions about the human soul and the nature of life itself. Initially, they lack the ability to maintain extended periods of concentration, but their zest for challenging authority and social norms gives them plenty of opportunity to test their budding ability to reason. Though they are able to think in abstractions and generalizations, they lack wisdom and experience that would give them perspective needed to use these new intellectual forces in productive and transformative ways. However, over the year, as new experiences are acquired and old prejudices challenged, students broaden their worldview and step towards an ability to be more objective in their thoughts than ever before.

The intellect develops gradually in the adolescent. For the 10th Grader, analyzing causal relationships, improving observational and listening skills, and learning to draw logical conclusions and make common sense judgments stimulates the growth of the intellect. Grade 10 is a year of analyzing parts and their relationship to the whole. This is reflected in the content of the curriculum as well as in their social development. While in Embryology they look carefully at the stage-by-stage development of a human baby, their social journey as a class is based upon aligning their emerging sense of individuality with the group, where they must learn how to work together on such endeavors as the Sophomore Class Play. It is crucial that as thought consciousness develops the adolescents work on their thinking out of a feeling for the subject. Thinking must be kept alive by maintaining a sense of wonder, awe and respect for the material studied. When educational material is brought in a way that appeals to the teen’s inner sense of goodness, beauty and truth, school provides them opportunities to hone their moral sensibilities. Working artistically within the curriculum improves the adolescent’s capacity for observation, memory and imaginative thinking. Further, artistic work allows the teen to experience freedom in the realm of feelings through which the will is connected to the intellect. The maturing 10th Graders are then able to
direct the intellect according to their own inner thought process, bringing their enthusiasm and feeling for a subject into balance with objectivity. This is the budding of free thought.

The Grade 10 Main Lesson blocks are Poetry; Odyssey; Sophomore Class Play; Ancient World; Civics; Embryology; Chemistry of Acids, Bases and Salts; Mechanics; Climatology; Sustainability; Trigonometry and Surveying. Academic track classes include English 2 and United States History, which alternate throughout the year; Spanish 3; and Mathematics (Geometry or Algebra 2). The Sophomore Class Play is one of two High School theater productions and is a milestone of that year. The Curriculum Trip in the spring of the Grade 10 year is thematically linked to the Odyssey block and involves a sailing voyage on the coast of North Carolina.

Grade 11

Grade 11 Curriculum Overview

(From: The Educational Tasks and Content of the Steiner Waldorf Curriculum 2000)

By the end of Grade 11 the students begin to attain objectivity in their feelings and thus increasing capacity to form judgments of taste, style and social tact. They bring mobility into their thinking, which goes beyond the logical causality of their thinking in Grade 10 and can now synthesize and correlate different factors within a holistic view. They are also able to think about infinite and non-sense-perceptible phenomena. The students have a self-directed sense of social responsibility and are able to correlate and integrate related phenomena in a more holistic understanding.

Students develop their sense of objectivity in part through their studies in Grade 11 English, when they are asked to write from perspectives other than their own. Their sense of social tact is stretched when they perform their week of Junior Internship under a community mentor, typically in a business or professional context. The Projective Geometry Main Lesson requires them to imagine, learn the theorems of, and draw circumstances that are outside their sense perceptions. The sense of social responsibility is supported through their study of history, with its examination of personal, community, and national, responsibility and power. The Botany Main Lesson leads students to an understanding of the complex and sophisticated inter-relationships within the plant world, and to see it as a whole, rather than myriad parts. Student progress is evaluated by classroom observation, papers, Main Lesson books, quizzes and tests.
The Grade 11 Main Lesson blocks are Parsival; Dante; Renaissance; Ecology; Botany; Electricity & Magnetism; Modern Atomic Chemistry; Sustainability; Projective Geometry; History through Music. Academic track classes include English 3 and United States History, which alternate throughout the year; Spanish 4; and mathematics (Algebra 2 or Precalculus.) Academic electives are offered in the sciences and the humanities.

Grade 12

Grade 12 Curriculum Overview

Grade 12 is the culmination of all of the experience that the students have gained from their years in a Waldorf School. This is the time when each student’s emerging self begins to glimmer through as they try to crystallize their interests in the outside world. This can be seen through their college/future career inquiries and choices and in their senior projects-- an individualized study that is presented to the entire school community during the senior year. At this stage, students are asking the question, “Who am I in reference to the world around me?” The Waldorf curriculum provides tools for the students to refine this question as they being their journey away from our school community and into the larger world.

At this point in the students’ development, they are able to grasp large conceptual ideas. In many ways, we give the students a picture of differing subjects as a whole experience by exploring the ways in which disparate parts make up the whole. For example, in Zoology, the students look at the parts of various organisms and how they make up the whole of the individual animal, and also how the individual animal is part of its own ecological environment, which in turn is part of a worldwide system. Students experience a variety of Main Lesson classes in which they are expected to produce a book or project at the end showing their grasp of the content and concepts presented. Students also have skill classes in essential subjects (in Waldorf education this includes the arts), as well as electives to augment individual interests. Quizzes, tests and papers may be forms of assessments for all of these classes depending on the individual teacher. Students receive final grades for these classes that are sent home quarterly and added to their final transcripts.

The Grade 12 Main Lesson blocks are Transcendentalist Authors; Faust, Senior Class Play; Modern World/Economics; Zoology; Optics; Biochemistry; Evolution; Sustainability; Calculus; History through Architecture. Academic track classes include English 4 and United States History, which
alternate throughout the year; and mathematics (Precalculus or Calculus.) Academic electives are offered in the sciences and the humanities.

**Subject Area Curriculum Descriptions**

“Vertical Curriculum”
HS Language Arts

By High School, students have the ability to be discerning in their analysis of texts that are brought to them in class. The students are exposed to grounding pieces of literature throughout their Main Lesson humanities classes and their skill-building track English classes. The particular pieces of literature shared in these classes are chosen with the aim of exposing students to great literature and writing styles, as well as works that support their soul experience at this point in their development. Each student is also ready, at this point, to begin to experiment and explore the world of writing in both narrative and expository forms. Ultimately, the students should be able to find their own voice through the culmination of these experiences.

Grade 9
The 9th Graders come to High School with a thirst for the truth; however, at this point the students tend to see the world in polarities. They are looking for the good, the right and the correct versus the wrong and evil in the world. This is the perfect time to reinforce grammar for the student. Here is an acknowledged truth that has defined rules and yet, in the English language, begins to open the door of ambiguity, which the student will not be ready to really embrace until future development takes place. Texts that the students explore may include *A Midsummer Night’s Dream* by Shakespeare and *Oedipus Rex* by Sophocles as examples of the polarity between comedy and tragedy. During the track class, students read texts such as *The Catcher in the Rye* and *Their Eyes Were Watching God* as examples of characters striving to figure out what is right. Short stories such as “On the Rainy River” and poems like “Those Winter Sundays” help broaden students’ sense of how individuals determine what is good.

Grade 9 Student Learning Objectives

- Demonstrate strong understanding of grammar and usage, including standard terminology for parts of speech, sentence elements, phrases, and common usage errors.
- Develop skills in close reading and analysis, including attention to character, theme, plot, and tone.
- Learn to participate actively in discussion and analysis of texts.
- Compose clear, grammatically sound sentences, paragraphs, and essays in both analytical and narrative genres.
- Understand the importance of citing sources in written work. Practice proper citation format.
Practice annotation of texts with an eye to their meaning and language.
Begin to practice relating details to overall themes, and seeing connections among disparate texts.
Begin to develop proofreading abilities.

**Grade 9 Assessment**
- Analytical essays based on interpretive claims (including rubrics with clear guidelines for quality work)
- Reflections on literature through the medium of personal narrative
- Creative work inspired by the texts’ themes
- Student-led discussions
- Oral presentations
- Proofreading/revising exercises
- Annotation checks
- Reading quizzes
- Grammar quizzes and tests
- Main Lesson Books

**Grade 10**
The 10th Grader has an interest in how the world works on an intellectual level and how we got to where we are today as a society. This is the time when we share research skills with our students. They learn how to discern appropriate from inappropriate information in the many sources that are available to students today. They learn the form that a research paper takes and how to cite their sources appropriately. They continue to hone their writing skills with specific examples and lessons in the “hows” of narrative and expository writing. Students’ Main Lesson humanities blocks during Grade 10 include Homer’s *Odyssey* and a Sophomore Class Play in which they must consciously be involved in the specific processes behind putting on a play. Examples of texts examined during an English track class are *Heart of Darkness*, *The Great Gatsby*, and *Gilgamesh*; the themes of group identity and journeys make up a large part of these texts as preparation for the work of differentiation that arises in Grade 11.

In their writing assignments, students develop and hone their ability to craft clear expository prose in response to literature and ideas. Creative assignments challenge students to evoke or echo a
pertinent theme. A month spent on the academic research paper leaves students with a clear sense of how to carry out a long-term project. The grammar component includes common and complicated problems in syntax.

**Grade 10 Student Learning Objectives**

- Develop a more nuanced sense of grammar, syntax, and usage.
- Expand upon skills in close reading and analysis, including attention to character, theme, plot, and tone.
- Practice annotation of texts with an eye to their meaning and language.
- Continue to participate actively in class discussion.
- Deepen the level of analysis of texts to include connections among texts and between text and the real world.
- In written work, convey thoughts with greater concision, clarity, and elegance.
- In analytical writing, support arguments with appropriate evidence; demonstrate mastery of the assignment; and provide some original insight into the text.
- In creative writing, show attention to theme, tone, and diction in one’s own work
- Learn to craft narratives with attention to pacing, setting, and details.
- Demonstrate understanding of the conventions and expectations of an academic research paper, including how to properly cite sources.
- Demonstrate a clear understanding of how to discern bias in source material
- Develop oral presentation skills
- Continue to develop proofreading abilities.

**Grade 10 Assessment**

- Analytical essays based on interpretive claims (including rubrics with clear guidelines for quality work)
- Creative writing, including poems and short stories
- Personal essays that develop a course theme
- Artistic work inspired by the texts’ themes
- Research paper and presentation
- Oral presentations
- Student-led discussions
- Proofreading/revising exercises
• Annotation checks
• Reading quizzes
• Grammar quizzes and tests
• Main Lesson Books

Grade 11

The 11th Grader has started on the path of differentiation. This is a long and difficult journey that can last into adulthood. The theme within Grade 11 is one of journey. This is first met with a Main Lesson block centered on the medieval classic Parzival by Wolfram Von Eschenbach, a story of one of King Arthur’s knights and his quest to find himself. Throughout the year, the student should encounter this theme, searching for an invisible truth, in most of the curriculum. Another Main Lesson block is an introduction to Shakespeare and some of his works, including the psychological quest of Hamlet. In our English track class this continues by exploring Huckleberry Finn by Mark Twain, Jane Eyre by Charlotte Bronte, The Life of Pi by Yann Martel, and other stories of a quest, internal and external, in which the protagonist finds a previously unknown truth along the way. Students write on these themes in expository and narrative submissions as well.

Grade 11 Student Learning Objectives
• Expand upon skills in close reading and analysis.
• Practice annotation of texts with an eye to their meaning and language.
• Continue to participate actively in class discussion by generating questions and responding respectfully to others’ questions and comments.
• Develop deep conceptual understanding of texts.
• Write with confidence and precision.
• In analytical writing, support arguments with appropriate evidence; demonstrate mastery of the assignment; and provide some original insight into the text.
• In creative and narrative writing: begin to develop a distinct voice.
• Continue to develop oral presentation skills.
• Begin to become a skilled proofreader.
• Continue appropriate citation practices.

Grade 11 Assessment
• Analytical essays based on interpretive claims
• Creative writing, including poems, short stories, and drama
• Personal essays that expand upon a course theme
• Artistic work inspired by the texts
• Oral presentations and performances
• Class discussions
• Main Lesson Books

**Grade 12**
The 12th Grader wants to figure out his/her individual place and destiny within the surrounding world. The question “Who am I?” is asked throughout this period of time, with the search for a post-graduation path for each individual student. The student also begins to show his/her individual interests in a Senior Project that he/she focuses on independently all year and presents to the community near the end of the year. The curriculum supports this journey of individual focus. In the humanities Main Lesson blocks, the students study Transcendentalist writers (my place in reference to nature and God), Faust by Goethe (my place in reference to evil), and evolution (my place within humanity). They are also required to stage a final Senior Class Play for which they hold a greater responsibility than ever before. During the English track class, the individual voice of the writer is explored both in the shared reading assignments and in the expository and narrative writing assignments. Examples of literature that the students read this year are *A Clockwork Orange* by Anthony Burgess, *Brave New World* by Aldous Huxley, *The Color Purple* by Alice Walker, *One Hundred Years of Solitude* by Gabriel Garcia Marquez and others.

**Grade 12 Student Learning Objectives**
• Demonstrate strong close reading and analytical skills.
• Continue to participate actively in class discussion, including leading discussions.
• Demonstrate deep conceptual understanding of texts.
• Write with confidence, precision, and style.
• In analytical writing, support arguments with strong evidence; demonstrate mastery of the assignment; and provide some original insight into the text.
• In creative writing, continue to develop authentic voice; demonstrate growing mastery of genre differences.
• Polish oral presentation skills.
• Continue to practice skillful proofreading and peer review.
• Consistently and thoroughly cite sources in written work.

**Grade 12 Assessment**

• Analytical essays based on interpretive claims
• Creative writing, including poems, personal essays, short stories, and verses
• Artistic work inspired by the texts
• Oral presentations and performances
• Class discussions
• Main Lesson Books

**Math**

**HS Mathematics**

**Grade 9**

**Algebra 1** (Yearlong)

For students with some Algebra 1 background, but who have not successfully completed Algebra 1 in 8th grade, we offer a year-long course completing that work. By the end of the academic year the students have studied the principles of real numbers, methods of solving equations (including multiple transformations), adding/subtracting and multiplying/dividing polynomials, factoring polynomials, applying fractions in equations, and an introduction to functions. The section on functions includes the graphing of lines and parabolas. Connections between the abstract principles of mathematics and the workings of everyday life are woven throughout the course.

**Student Learning Expectations**

• Use multiple operations to solve single variable equations
• Represent real situations using variables and equations
• Properly manipulate polynomials
• Solve equations that involve fractions
• Graph equations in two variables
• Find the slope of a line; draw the graph of a linear equation
• Solve simultaneous equations by: substitution, elimination, and graphing
• Plot quadratic equations
• Use algebra to solve ratio and proportion problems

Assessment
• Homework is assigned nightly, and reviewed by the teacher.
• Students take periodic quizzes.
• The teacher assesses the student’s participation in the classroom

Geometry (Yearlong)
Students who have successfully completed Algebra 1 in 8th grade begin High School mathematics with Geometry. This course covers all the basics of two- and three-dimensional geometry, including congruence, symmetry, straightedge/compass constructions, segment/angle relationships, triangles, circles, polygons, areas, perimeters, volumes, platonic solids, fractals, and relevant proofs. Some of these concepts will be expanded into the context of coordinate planes. We also continue to develop mathematics organization in our written work and to review key components of Algebra 1 in order to ensure retention in preparation for next year’s Algebra 2 course.

Student Learning Expectations
• Develop systematic approaches to solving challenging problems
• Develop consistent formats in written work
• Understand dimensionality in relation to distance, area, perimeter, volume
• Solve and create ‘elegant’ geometry problems, which are simultaneously simple and challenging
• Understand several key theorems and the historical contexts in which they were developed
• Develop capacities of geometric imagination including spatial visualization and transitional shape movement
• Apply Algebra 1 skills to geometric scenarios both graphically and algebraically

Assessment
• Homework is assigned frequently and is assessed through participation during review
• Quizzes are given weekly
• The teacher assesses the student’s participation in the classroom
• Students compile refined notes of key topics in a Track Class Book, collected monthly
Probability Main Lesson Block: Students consider real life situations that have random outcomes, and then ones that have logical, mathematically predictable outcomes. Coin flip and card draw exercises are carried out in small groups, with the results recorded. Then students conduct an analytical evaluation and compare the results of the two. Developed techniques include tree diagrams, block diagrams, calculation of ‘Expected Value’ using area diagrams, and strategy optimization.

Student Learning Expectations

- Explain a ‘strategy’
- Create a frequency bar graph from data
- Understand the differences between theoretical model, experimental data, and simulation
- Recognize the difference between coincidence and causation
- Create an area diagram to represent the likelihood of various outcomes
- Assign a probability from 0 to 1 for a given event
- Create simulations to predict outcomes
- Understand the theory of two dice sums and how all possible outcomes can be represented by an area diagram
- Find the ‘expected value’ for an event
- Find an expected value when using weighted values
- Compare average to expected value
- Create area diagrams to represent a sequence of dependent events
- Understand the principles of a lottery and of insurance

Assessment

- Classwork
- Homework assignments
- Quiz and test scores, and the
- Main Lesson book

Grade 10

Geometry (Yearlong) This course is offered to students who completed Algebra 1 in Grade 9. (See description above.)
Algebra 2 (Yearlong) For each unit of this Algebra 2 curriculum, students are presented with a Conceptual handout, which presents the essential principles, and a Text handout, which not only gives the students practice problems, but also leads them toward further discoveries. The year begins with the units Functions (including Composite Functions and Inverse Functions) and Simultaneous Equations (and the three methods of solving them). Students are then introduced to a combination of two concepts from the past – Absolute Values and Inequalities. In combination, these two behave in a more complex manner than they do individually. This is followed by units on Exponents (including negative and fractional exponents), and Exponential Equations; Logarithms (essentially the inverse of Exponential functions); Rational Expressions (fractional polynomials and their manipulation); Radicals (and their exponential equivalents); Imaginary Numbers (based on the semi-fictional square root of negative one); and Conics (the circle, parabola, ellipse and hyperbola).

Student Learning Expectations
• Create equations to represent situations. Solve them.
• Understand and solve inverse functions and composite functions
• Solve simultaneous equations using three different methods
• Solve inequalities that include absolute value functions
• Appropriately use the three rules of exponents to solve exponent problems
• Use exponential equations to represent cases of population growth and acidity
• Appropriately use the three rules of logarithms to solve problems
• Use logarithmic equations to represent cases of sound and seismic intensity
• Perform the manipulations needed to solve Rational Expressions.
• Simplify radicals, represent them as exponents
• Solve problems involving radicals
• Understand and manipulate imaginary numbers.
• Find solutions to equations involving imaginary numbers.
• Understand and plot the four conics

Assessment
• Homework is assigned nightly, and reviewed by the teacher.
• Each chapter is followed by a written test.
• The teacher assesses the student’s participation in class.
Trigonometry and Surveying Main Lesson Block: During this block students learn the principles of trigonometry and then apply them, both in their written work in the classroom, and outdoors in the field, using standard surveying equipment – transit, tripod, measuring tape, leveling rod. Students solve distance and angle problems using the trig functions. They also study the trig identities, and apply inverse trig functions. The course concludes with a day of marine navigation practice using NOAA nautical maps.

Student Learning Expectations
- Understand the definition of the six trig functions.
- Demonstrate the ability to use the trig functions to solve problems involving distance and angle measurement.
- Make a detailed graph of sine, cosine, and tangent from 0 to 360 degrees.
- Be able to generate the three principle trig identities.
- Understand inverse trig functions and use them to solve problems.
- Use standard surveying equipment to measure boundaries, set out boundaries; and to create property and topographic maps.
- Demonstrate the differential leveling method of finding relative elevation, using a transit and a leveling rod.

Assessment
- Homework is assigned nightly, and reviewed by the teacher.
- Students take three quizzes.
- Student generate a Main Lesson book in which they demonstrate their comprehension of the material. The Main Lesson book includes a Summary Essay describing the trajectory of the class.
- The teacher assesses the student’s participation in the classroom and during field exercises.

Grade 11
Algebra 2 (Year Long) Students who completed Geometry in Grade 10 study Algebra 2 in Grade 11. (See description above)

Precalculus (Yearlong) The year begins with a review of exponents, polynomial factoring and rational equations. This is followed by ‘Graphs and Graphing Utilities’, and ‘Analyzing Graphs and
Functions’, during which students gain facility entering a wide variety of functions into the calculator (including absolute value and 'step functions’), establishing the viewing window (domain and range limits), displaying the graphs, and using the cursor to identify critical values.

During the second half of the semester they delve more deeply into the nature of the trigonometric functions, using radian measure, examining even and odd functions, plotting and examining the graphs, and solving problems involving angular speed and the speed at a radius. Students use trig identities to solve equations, and learn how to evaluate the trig functions graphically and analytically.

We open the domain of our trigonometry study from the limits of the right triangle, to the infinite range of angles - positive or negative – in any quadrant. This leads to an examination of the periodicity of the trig functions, and the principle of phase shift. Students used these functions to solve problems of respiration and blood pressure. When graphing these functions, students alter the scales on their graphing calculators to optimize the display.

Subsequently, each student chooses and researches a mathematics topic from a selected collection of books. The topics are then presented to the class, and assessed by the teacher and the students.

Finally, students investigate the principles of ‘Series and Sequences’, including the standard terminology and notations, the formulae for calculating the ‘nth’ term of a series, and recursive definitions. These are used on depreciation, population growth and annuity applications. The formulae for the sums of finite and infinite series are considered and applied.

**Student Learning Expectations**

- Proficiency using exponents, and factoring polynomials
- Effectively use the graphing calculator evaluate functions, and to find solutions
- Effectively use 'step functions'
- Demonstrate facility with the following elements of the trigonometric functions: radian measure, even and odd functions, angular speed, periodicity, phase shift
- Find the nth term in a series (including for recursively defined series), find the sum of a finite (or infinite) series
- Demonstrate the ability to independently learn a new mathematics topic and report on it to the class
Assessment

- Homework is assigned nightly, and reviewed by the teacher.
- Students take periodic quizzes.
- Each student orally presents the topic they learned independently; their presentation is evaluated by the teacher and the students.
- The teacher assesses the student’s participation in the classroom

Projective Geometry Main Lesson Block: Projective Geometry is a field of study that lies outside the traditional High School curriculum but is a required course in the Waldorf High School curriculum. In this branch of mathematics there is no concept of measurement; a triangle has four regions; and parallel lines may meet at infinity. This study requires that students leave behind prior mathematical notions and begin to learn an elegant new set of rules that possesses a balance and harmony all its own.

The Main Lesson constitutes an introduction to the concept of infinity, and requires students to consider and discuss its apparent contradictions. The projective geometry theorems of Pappas, Pascal, Desargues and Chasles are introduced. Students are required to create a drawing, and accompanying text, to represent each of the twelve projective geometry principles/theorems that are introduced.

Student Learning Expectations

- Grasp the twelve main principles of Projective Geometry that are presented during the block
- Learn how to clearly and accurately represent these principles in diagrammatic form.

Assessment

- Students submit a portfolio of twelve plates, each demonstrating one of the twelve principles of Projective Geometry presented during the block.
- Three quizzes

Grade 12

Precalculus (Yearlong) Students who completed Algebra 2 in Grade 11 take a yearlong course in Precalculus. (See description above)
Calculus (Yearlong) The Calculus track class covers all of the essential concepts as well as a variety of applications, including limits, Zeno’s paradoxes of motion, philosophies of infinity, the derivative, rules of derivatives, instantaneous speed, acceleration, using derivative concepts to analyze functions, economics, the antiderivative, integrals, and applications. Students derive most of these relationships independently of a textbook or graphing calculator, and key prior concepts are reviewed in preparation for their applications in calculus. The course aims to facilitate a holistic, intuitive understanding of calculus both for students who will not continue study of the subject in the future and for those who intend to build later upon this solid conceptual foundation in much greater technical detail.

Student Learning Expectations

• Consistently apply systematic approaches to solving challenging problems, both in terms of calculations and realistic applications of concepts
• Understand the mathematical concept of the limit and its importance to calculus
• Develop an intuitive understanding of the derivative and integral
• Understand the logical origins of calculus in historical context
• Apply derivative concepts to physical and economic scenarios
• Calculate volumes of three-dimensional shapes using integral applications

Assessment

• Homework is assigned frequently and is assessed through participation during review
• Quizzes are given weekly
• The teacher assesses the student’s participation in the classroom
• Students compile refined notes of key topics in a Track Class Book, collected monthly

Calculus Main Lesson Block: Students enrolled in Precalculus during Grade 12 have a Main Lesson block in Calculus. This course covers the basic concepts of calculus and their applications, including limits, derivatives, series, sigma notation, Zeno’s paradoxes of motion, philosophies of infinity, acceleration, instantaneous speed, the power rule, and integrals. The course aims to facilitate a holistic understanding of calculus, particularly for students who may not continue study of the subject in the future. The Calculus block covers a wide range of concepts but does not serve as a substitute for the technical computations and notations that are typically taught during a yearlong course.
Student Learning Expectations

• Understand the mathematical concept of the limit and its importance to calculus
• Develop an intuitive understanding of the derivative and integral
• Understand the logical origins of calculus in historical context
• Apply derivative concepts to physical and economic scenarios
• Explore volumes of three-dimensional shapes using integral applications

Assessment

• The teacher assesses the student’s participation in the classroom
• Students compile refined notes of key concepts and personal relationship to the material in a Main Lesson Book

Statistics Main Lesson Block: Students enrolled in Calculus in Grade 12 have a Main Lesson in Statistics. The topics include the elementary principles of mean, mode, and median; frequency distribution; percentiles; standard distribution; the normal curve; correlation; prediction and regression. Students create Excel spreadsheets to calculate many of these values.

Student Learning Expectations

• Learn the significance, and learn how to calculate, mean, mode, and median
• Learn what a frequency distribution means
• Given a data point in a data set, calculate the percentile; given the percentile and a data set, find the respective data point.
• Given a data point in a normally distributed data set, calculate its standard deviation; given the standard deviation of a point within a normally distributed data set, find the respective data point value.
• Use the correlation formula to calculate the correlation between two elements of a data set
• Predict subsequent data points in a set using the prediction formula.
• Predict prior data points in a set using the regression formula.
• Know how to use Excel software to find the above values.

Assessment

• Homework is assigned nightly, and reviewed by the teacher.
• Students take periodic quizzes.
History

HS United States History

Grade 9
Students focus on modern America which is defined as the end of the 19th Century and the 20th Century (1879-2000). What are the ideas and circumstances that enabled the USA to become a hegemonic world power? The immediate past is the platform for the coming future. Which future shall America take--future societal health or dysfunction? Shall America have ideology or freedom of thought, courage or fear, justice or injustice, optimism or pessimism? Shall the equal rights of all be guaranteed and treasured? Shall authentic needs of Americans be met by our economic system?

Student Learning Expectations
• Identify key events, dates, personalities, concepts of modern American History
• Be able to identify key ideas in a passage and write in a coherent and sequential manner
• Note taking that records the key ideas
• Be able to present before a class audience a constructed research project coherently
• Understand concepts of cultural, economic, and political hegemony; USA as a responsible World Power
• Understand concept of historic evolution of the modern American system
• Understand concept of justice in the political, economic, social realms of American society and the world

Assessment
• Written assignments in class and at home
• Quizzes and Final Examination-essay that address comprehension and identifications
• Research project

Grade 10
How did America come to be? From where did the Union spring? Students learn of the long-lived indigenous Native American past (Upper Paleolithic to 1492). Many prehistoric and historic
indigenous cultures have risen and disappeared before modern European contact. The American experience of European colonial conquest woven side-by-side with Native American and African peoples experience 1492-1754 is studied. Contact, clash, and melding of cultural worlds are investigated. The establishment of viable colonial footholds through economics, politics, and culture is understood. The imperial struggles for North America are featured to learn about the surprising emergence of the American Nation (1754-1815).

**Student Learning Expectations**

- Identify and express how key events, date, personalities, and concepts unfolded in the origins of American History
- Be able identify and analyze key ideas in a passage and write an analysis
- Demonstrate note taking that records key ideas and how these ideas relate
- Present research in a coherent manner with analysis of the subject
- Identify and relate how Pre-Columbian cultures unfolded in time and their internal interaction
- Understand how European Cultures migrated to the Americas successfully and the subsequent impact on indigenous population
- Understand the forced migration of sub Saharan populations to the Americas and its impact

**Assessments**

- Written assignment in class and at home
- Quizzes and Final Examination- essay analysis
- Research project

**Grade 11**

As the Nation matures and strives to gain an inner sense of itself students learn of complex antebellum America, the American Epic of the Civil War, and post Civil War Reconstruction (1815-1879). A powerful centralized Union was forged in these years. The dismantling of the institution of slavery and the plight of the Native Americans is studied.

**Student Learning Expectations**

- Analyze and synthesize events, personalities and concepts into an individuated understanding
- Synthesize varied fact and dates into a cogent whole
- Rework written material into a unique expression
- Present coherent multi-sided research as a whole picture to a class audience
Concepts
• Comprehend the complex factors that gave rise to the American Civil War
• Understand the role of African-Americans in antebellum America, the Civil war, and Reconstruction
• Comprehend the ramifications of the Civil War on the American political system, economic system, and culture
• Understand how cultural freedom of Native Americans plays out its final chapters

Assessments
• Written assignments in class and at home
• Quizzes and Final Examination which emphasize written essays which involve analysis to synthesis from the individual student's perspective
• Research project

Grade 12
A harmonized and integrated view of American History is sought (1607-Present). Culture, economics, and politics are considered for the role they play in American history. Students consider Pre-Columbian America, settlement, imperial wars of competition, the emergence of the Union, and the survival of the Union amid internal strife and contradiction. The emergence of a new powerful nation bestriding the world, and the question of the American future are studied for an encompassing view. What part shall the individual now play in this Union? What role shall the USA play in the world?

Student Learning Expectations
• Locate comprehensively issues, events, personalities, geography in American history
• Express in writing or speaking one's individual view as well as another's individuated view
• Be able to express the spectrum of American History in an accurate artistic way that connects the individual listener or viewer to the historic
• Demonstrate an integrated overview of the historic flow and evolution of History of the Americas pre-Columbian and post-Columbian
• Demonstrate an integrated overview of English speakers in North America and the emergence of the United States of America
• Comprehend the complex web of contributions to create the United States of America from diverse races, ethnicities, individuals, genders, those with disabilities, etc.
Assessment

- Written assignments in class and at home
- Quizzes and a Final Exam that address the overview of American History with recognition of historic individual striving
- Research biography

Sciences

High School Sciences: Physical, Chemical, Life, Earth

The primary objective of the high school science curriculum is to offer carefully selected content that encourages students to discover who they are as emerging adults by employing phenomenological approaches. This approach hones observation skills, critical thinking, and flexibility of perspective. The Main Lesson blocks progress throughout high school from the slow-moving, structurally mechanical, and easily perceptible to the actively dynamic, vibrantly alive, and existentially challenging. Laws of patterns are derived from phenomena, and subject material becomes more integrated, interdependent, and complex.

In addition to the Main Lesson blocks, Grade 11 and 12 students are offered the option of taking a scientific academic elective each semester in the rotating general subjects of physics, chemistry, biology, and sustainability. In these academic electives students can delve deeper into the vast extent of scientific information, most of which is not appropriate for or feasible in Main Lesson blocks.

Grade 9

Earth Science: Dynamic Earth

The study of geology allows the 9th Grader to begin a new quality of observation and imagination. Specimens are relatively static in nature, and yet each one carries with it an almost incomprehensibly long history that can be apparent through its characteristics. Students refine their observation skills in a controlled manner and employ their imaginative abilities to live into the immense pressures and forces that form rock. Students explore the biographies and circumstances of key people in the development of geology, and they are challenged to imagine the countless ways
that Earth’s formative processes have affected human history. The class ventures to Pilot Mountain, NC, for an experience of one of the area’s most notable geologic features.

**Student Learning Expectations**

- Understand several hypotheses of the formation of the Earth and Moon
- Appreciate geologic time frames
- Demonstrate imagination of Earth’s interior formative processes in three dimensions through time
- Identify relevant observation practices
- Understand plate tectonics and the complexities of the rock cycle
- Appreciate the process of geologic discovery throughout human history

**Assessment**

- Main Lesson book
- Research presentation
- Class participation

**Life Science: Anatomy and Physiology**

The Grade 9 Anatomy and Physiology block is particularly focused on the physical structure of the human body and the relationship between form and function. Often the 9th Grader is still becoming familiar and coordinated with his or her changing body, and an exploration of the mechanical lawfulness of the skeletal and muscle systems as well as the sense organs meets the need of this age group to establish a sense of security in their individual physical form. This course involves numerous drawings of organs and structures, guided by the words of Goethe: “only that which I can recreate from memory can I truly understand.” More complex relationships, rhythmical processes, and homeostasis are explored as students see the human being as more than a collection of body parts, organs, and bodily systems. Each human is a unique and whole being, and the body is the vehicle by which one encounters self and interacts with the world.

**Student Learning Expectations**

- Understand leverage, rotation, and support of the skeletal system
- Understand the physical lawfulness of the eyes and ears in sense perception
- Explore the heart and circulatory system as a dynamic rhythmic element of the body
- Understand sound creation in the larynx
Assessment

- Main Lesson book
- Research presentation
- Class participation

**Chemical Science: Organic Chemistry**

In Grade 9, students study the chemistry of living organisms: photosynthesis, chlorophyll, sugars and other carbohydrates, fermentation, alcohols, organic acids, esters and essential oils. They also explore combustion, oxidation and reduction, common gases, the composition of air, classes of organic chemicals, and how organic reactions occur. Finally they study some of the technology associated with organic substances, including guncotton, celluloid, petroleum refining and polymers.

**Student Learning Expectations**

- Understand characteristics of organic compounds
- Relate photosynthesis to combustion reactions
- Understand how energy is passed from the sun through living organisms
- Become familiar with commonly used organic compounds in society

Assessment

- Main Lesson book
- Research presentation
- Class participation
- Final test
- Weekly quizzes

**Physical Science: Thermodynamics**

This Main Lesson block involves the observation of phenomena in the realm of heat, cold, and change of phase. This includes some work in measurement and observation skills. Topics will progress toward understanding basic thermal processes and applying them to practical applications including the internal combustion engine and residential passive solar heating. Some of the experiments that will be performed in the class include Pascal’s Tube, Can Crush, Hydraulic Jack, Convection of a Gas Apparatus, Fire Piston, and the Rising Solar Bag.
Student Learning Expectations

- Understand how heat transfers to achieve equilibrium
- Understand that the experience of heat is a relative condition

Assessment

- Main Lesson book
- Research presentation
- Class participation
- Final test
- Weekly quizzes
- Project

Grade 10

Life Science: Embryology

The Embryology block explores in great detail the first eight weeks of human pregnancy, including the scientific and spiritual questions the subject presents. This class introduces a fundamental difference from last year’s Anatomy and Physiology block in that students are asked to reflect upon their embryological development through imaginations of their own past experiences rather than through their present experience in their physical bodies. The block marks the onset of a particular sensitivity to living things that is meant to be fostered and expanded upon throughout high school. Students explore gametogenesis, a contrasting of sperm and egg cells, fertilization, female reproductive anatomy, cell division, genetic material, blastocyst nesting, gastrulation, the three germ layers, chronological structuralization of the human form, and developmental complications. Special attention is devoted to the practice of phenomenology, and in addition to revisiting their own birth stories as narrated by their parents, students observe first-hand the embryological development of incubated chickens in an effort to gain an understanding of continuous metamorphosis.

Student Learning Expectations

- Understand the polarities of sperm and egg cells
- Learn the chronology of anatomical polarities as they emerge in the human embryo
- Explore the philosophical questions of the origin of the individual human
- Examine the phenomenon of an entire human being emerging from a single cell
Assessment
• Main Lesson book
• Research presentation
• Class participation

Chemical Science: Acids, Bases and Salts
In Grade 10 the students study the chemistry of acids, bases and salts: what are acids and bases, where are they commonly found in the human body, acid/base indicators, electrolysis of water, an experience of hydrogen and oxygen, generation of acids and bases, neutralization, Arrhenius’ theory of electrolytes, formula weights, moles and concentration, the pH scale and the definition of pH, salts as the result of acid and base, decomposing a salt to acid and base, crystallization and crystal forms, common salt substances, acidic and basic salts (hydrolysis), buffers, amphoterism, and oscillating reactions.

Student Learning Expectations
• Comprehend through experience the different characteristics of acids and bases
• Test for acids and bases using different indicators
• Know how acids and bases are formed.
• Know how of acids and bases are used in society and in the human body.
• Make different concentrations of different kinds of solutions, as assigned
• Know that acids and bases neutralize each other to form salts

Assessment
• Main Lesson book
• Research presentation
• Class participation
• Final test
• Weekly quizzes

Physical Science: Mechanics
The 10th grade physics block is an experience-based exploration of classical mechanics, including practical examples of statics and dynamics. In statics we explore equilibrium, or balanced force systems that produce no acceleration, with examples of force, torque, friction, and inertia. The
mechanical advantage of a hand tool brought in by each student is determined. Resolving two-dimensional force vectors into orthogonal components is used in dynamics, where we explore force systems that produce acceleration. In the historical context of the dawn of the new age of physics, experiments of Galileo and Newton are repeated using gravity as the accelerating force. Timed drops of objects of differing weights, and timing balls rolling down an inclined plane are used to derive the constant for the acceleration of gravity. The course concludes by applying all of what has been learned to launching air-powered rockets on the athletic field, studying the effects of launch velocities and angles, and comparing measured and calculated data. In addition to conducting the experiments, students build an original balloon-powered car and we have a car race in the classroom.

**Student Learning Expectations**

- Understand the concept of force and acceleration and its relation to mass and friction
- Know Newton’s laws of motion and how some of the classical ideas in mechanics developed
- Calculate quantities of force, acceleration, work, etc. when given the appropriate amount of information
- Construct a simple model cart and the dimensions and forces it needs to achieve efficient motion

**Assessment**

- Main Lesson book
- Research presentation
- Class participation
- Final test
- Weekly quizzes

**Earth Science: Climatology**

The Climatology block builds upon the content and skill foundations established during Dynamic Earth, with the primary difference being the accelerated time frames during which physical processes occur. Students are becoming more active and dynamic in their thinking, and thus they are open to the challenge presented by a system which is constantly in fluid motion. Special attention is given to the Sun as the primary source of energy of the atmosphere, biosphere, and
Students begin with the solar system as a whole and focus more locally to understand the seasons, atmospheric layers, the solar radiant budget, mass air circulations, the Coriolis Effect, prevailing winds, climate regions, and specifics of cloud formation. Outdoor observations are essential components of daily class, and students are encouraged to use their sense perception in addition to mechanical measuring devices. The climate is viewed in constant interaction with the biosphere, and considerable attention is given to mechanisms of anthropogenic climate change.

**Student Learning Expectations**

- Develop an accurate spacial awareness of the Earth in relation to the Sun
- Refine phenomenological observation skills according to more active physical processes
- Understand the role of the Sun as the primary energy source of climate and biosphere
- Explore variations in mechanism of cloud formation
- Develop a basis for engaging the climate-change discussion with unique insight

**Assessment**

- Main Lesson book
- Research presentation
- Class participation

**Grade 11**

*Physical Science: Modern Atomic Chemistry*

In Grade 11 we study atomic theory: what is the nature of matter? This covers the different phenomena and evidence that have led to the current atomic theory: constant proportions and Dalton’s theory; Brownian motion; properties of isomers and the notions of organic structure; estimates of atomic size; magnetic and electrical properties of matter; unique interactions between light and matter; radioactivity and the Rutherford experiment; the Bohr model of the atom and Schrödinger’s wave equation; and finally the modern view of the atom and matter.

**Student Learning Expectations**

- Know the development of the different models of the atom through time
- Understand how scientists learned about the quantities need to create certain kinds of chemical reactions
- Understand and know the steps in developing the periodic table
- Understand why atom cans only absorb a certain amount of energy
• Understand the meaning of spectra and why stars have different spectra
• Understand the importance of viewing an electron as a wave and its meaning to the modern model of the atom
• Name chemicals, write chemical formulas, and balance chemical equations

Assessment
• Main Lesson book
• Research presentation
• Class participation
• Final test
• Weekly quizzes

Physical Science: Electricity and Magnetism:
The Grade 11 physics block is an experience-based exploration of the basic nature of electrical and magnetic phenomena. Students explore ideas for a modern original invention based on principles of electricity and magnetism. When ready, they can then elect to present in class either their invention, or alternatively an acted-out biographical skit about a chosen scientist. The skit can either be solo, or done with another student as a conversation between two scientists. Experiments start with electrical charge experiments, including an operating Van de Graff generator. Simple magnetic examples are taken up next and the students work toward more complicated systems of magnetic fields. The basic experiments will be followed by exploring the relationship of electrical and magnetic fields, permitting the study of applications which include such devices as batteries, electrical and electronic circuits, robotics, and electric motors.

Student Learning Expectations
• Describe the history of the discovery of electricity and magnetism
• Understand the relationship between electricity and magnetism and why it is one of the fundamental forces
• Understand the application of principles in electricity and magnetism in the many machines and computers in the modern world

Assessment
• Class participation
• Class project
Life Science: Ecology
As the 11th Grader becomes increasingly able to appreciate the complex and often overwhelming interconnectivity of life on Earth, the Ecology block provides a clear framework within which to begin a more formal understanding of these relationships and the ways in which they are intimately related to the environment. In the life sciences, students have been moving toward a more holistic understanding of living systems, and Ecology provides the opportunity to understand entire systems rather than just environments, species, and individuals. As students become more aware of themselves in relation to the world around them, the Ecology block addresses in clear terms the ways in which a human being’s individual actions have substantial hidden effects. Mathematical analysis is incorporated into a more abstract and imaginative understanding of living systems.

Student Learning Expectations
- Demonstrate the capacity to imagine entire ecosystems as individual living organisms
- Understand niche exploitation in the context of evolution
- Understand relative species significance in relation to ecosystem health
- Compare homeostasis of ecosystems to other living organisms

Assessment
- Main Lesson book
- Research presentation
- Class participation

Life Science: Botany
The Botany block is a culmination of much progress in the development of the student as a scientist. Occurring toward the end of Grade 11, the Botany block employs the students’ most refined and patient observation skills as they are called upon to observe extremely subtle changes in plants over the course of days and sometimes even minutes. The 11th Grader, now with a thorough understanding of abiotic environments, is challenged with seeing the plant as a representative of itself, its species, and its environment. The living activity of plants is fundamentally different from that of the mineral and the climate, and yet the plant is still merely rhythmic in nature, a spectacular balance between the Earth systems and the more interactive animal kingdom yet to come. Students
engage in scientific, philosophical, ethical discussions of genetic modification and patenting of plants. The class ends with a curriculum trip to Natural Tunnel State Park, VA, where students apply their integrated understanding of Earth and life sciences in a week-long immersion experience.

**Student Learning Expectations**
- Develop the focus and observation skills necessary to watch plant activity
- Apply knowledge of Earth sciences to understanding plants in relation to environment
- Explore the relationship between humans and various plants throughout history
- Understand phylogenetics and biological classification

**Assessment**
- Main Lesson book
- Research presentation
- Class participation

**Grade 12**

*Life Science: Zoology*

Zoology is in many ways the capstone of the life sciences curriculum, and the 12th Grader is now incorporating many years of experience, knowledge, and observation into a relatively brief exploration of nine primary phyla of the Animal kingdom. The 12th Graders observe sentient creatures that interact with the observation process in ways that are drastically different from those of plants, winds, and rocks. The students are challenged with relating to animals while simultaneously questioning the nature of the human element which separates them from the rest of the Animal kingdom. In addition to exploring the relationships between themselves and animals, students embark on a week-long voyage to Hermit Island, ME, where they meet up with senior classes from several other Waldorf schools in observation of marine invertebrates. This intimate social experience with other Waldorf classes enables many of the students to contextualize the value of their education to their own development.

**Student Learning Expectations**
- Understand the 5-kingdom model of the tree of life
- Relate an animal’s form and function to its environment
- Relate the animal kingdom to the human being
• Become familiar with characteristics of the primary phylla
• Synthesize concepts from all prior science blocks in a dynamic manner

Assessment
• Main Lesson book
• Research presentation
• Hermit Island notebook
• Class participation

Chemical Science: Biochemistry
Grade 12 first measures their lung capacity as an introduction to respiration. They study diffusion and finally the hemoglobin molecule in detail as a carrier of oxygen. Students also look at blood type. They then study combustion, photosynthesis and cellular respiration. Students look at isomers and study DNA replication, transcription, and protein synthesis in detail. They conduct a number of labs looking at DNA, polymers, sugars, and osmosis. We visit a local lab studying respiratory disease if time allows.

Student Learning Expectations
• Describe the structures and functions of the main kinds of biochemical compounds.
• Know how information is stored in the cells and how this is used to make the molecules for life
• Understand how organisms use sugars to create the energy they need for life

Assessment
• Main Lesson book
• Research presentation
• Class participation
• Final test
• Weekly quizzes

Physical Science: Optics
This Grade 12 physics Main Lesson block begins with experiences that allow a thorough investigation of physical and conceptual elements at work, starting with a structured visit to observe Heartwood Pond. Students develop an understanding of human vision through directly
experienced phenomena, and thus make the distinction between the roles of intention, observation, and forming concepts. Experiments explore the phenomena of reflected and refracted images as well as their underlying mathematical relationships (Snell’s Law, simple prisms, and simple lenses). Additional experiments explore the changing perception of color, studied under various atmospheric conditions. Measurements are made using a spectrometer, lasers, diffraction and gratings. Effects generated by manmade processes are also discussed. A visit to the Morehead Planetarium in Chapel Hill is possible if our schedule allows it.

**Student Learning Expectations**

- Understanding how our perception of color arises under different conditions
- Know the effects of prisms, mirrors and lenses on color and image formation and understand the laws governing them
- Understand both the Newtonian and Goethean views of light and color

**Assessment**

- Main Lesson book
- Research presentation
- Class participation
- Final test
- Weekly quizzes

**Life Science: Human Evolution**

How did our species Homo sapiens arise? The Darwinian model is examined to see how it can shed light on this matter. Each step in unfolding human evolution is identified and considered. The greater context of evolution is considered in which human evolution is part. Human prehistoric archeology is examined to see how it can throw light on the unfolding capacities of the human being. Controversies that live in the science of anthropology will be considered to see where the big questions reside.

**Student Learning Expectations**

- Identify the evolutionary steps in human evolution and evolution
- Identify human evolutionary forms
- Identify unresolved scientific questions in Anthropology
- Understand the differences between Evolutionary Theory and Creationism
Understand concepts of geologic time and environmental change
Comprehend human faculties as adaptations to a changing world

Assessment

- Main Lesson book
- Research presentation
- Class participation
Student Learning Expectations

Grade 1

- LANGUAGE ARTS
  - Recognizes and can write all upper case letters in print
  - Knows sounds of initial, medial and final consonants
  - Identifies variations in vowel sounds
  - Identifies variations in consonant sounds
  - Ability to write/copy simple words and sentences
  - Ability to track and copy text from chalkboard onto paper
  - Recognizes short familiar words and letter patterns in context
  - Recognizes short common words introduced (the, and, to, etc.)
  - Can speak in complete sentences
  - Expresses ideas clearly in speech
  - Reads printed words
  - Can write simple words and sentences
  - Copy basic punctuation (period, question mark, exclamation point)
  - Can track and copy text from chalkboard onto paper
  - Can recall stories or events in sequence and with accuracy
  - Ability to articulate and repeat sounds and words
  - Memory for stories as expressed orally
  - Quality of speech: enunciation, volume, fluidity
  - Able to create simple sentences from a story or event

- ARITHMETIC
  - Ability to count to 100 by ones, by fives and by tens forward and backward
  - Ability to count by twos, threes and fours - respectively to 24, 36 and 48
  - Ability to clearly write numbers from 1 to 100
  - Ability to work arithmetic problems mentally
  - Knowledge of number bonds up to 20 (addition and subtraction)
  - Ability to recognize odd and even numbers
  - Grasps the concept of zero
  - Addition, sums through 100
Emerson Waldorf School Curriculum Guide

Grade 2

• LANGUAGE ARTS:
  0 Recognizes and can write all upper and lower case letters in print
  0 Knows sounds of initial, medial and final consonants

• WORK HABITS
  0 Spatial Awareness: Ability to use whole page when writing or drawing
  0 Ability to follow instructions
  0 Quality of finished work
  0 Ability to complete assignments in a timely manner
  0 Level of motivation/interest for doing work
  0 Use of imagination
  0 Respectful of class by raising hand or waiting for turns
  0 Care for materials (crayons, paper, books, etc.)
  0 Ability to work independently
  0 Ability to work with a group of peers
  0 Focus and attention
  0 Participation

• GENERAL SKILLS
  0 Balance and coordination
  0 Throwing and catching
  0 Ability to stand upright
  0 Ability to imitate
  0 Distinguish right from left
  0 Stamina
  0 Demonstrates awareness/initial capacity for self-control
  0 Spatial orientation of self in relation to others
  0 Quality of control with artistic lessons
  0 Interaction/Respect with peers
  0 Interaction/Respect with adults
  0 Classroom behavior

Emerson Waldorf School Curriculum Guide; Feb-15
Knows hard and soft sounds (g, c, y)

Knows variations in vowel sounds, makes logical choices of vowels and sounds in reading and spelling

Recognizes: digraphs (ch, sh, th, etc.); consonant blends (br, fl, str, etc.); vowel digraphs (ea, ie, oa, etc.); vowel blends (au, ao, ou, etc.)

Recognizes common letter groupings, initial and final (st..., str..., ...est, ...ard, ...old, ...ill, ...ick, ...ed, ...ing, etc.)

Sounds out short unfamiliar words and letter patterns logically

Recognizes short familiar words and letter patterns in and out of context

Recognizes short common words at sight (the, and, to, etc.)

Can speak in complete sentences

Expresses ideas clearly in speech

Reads printed words

Can write simple words and sentences

Use basic punctuation (period, question mark, exclamation point)

Can track and copy text from chalkboard onto paper

Can recall stories or events in sequence and with accuracy

Properly use initial capitalization and capitalize proper names

Speech/recitation/clear articulation/expression

Memory for stories as expressed orally

**ARITHMETIC**

Mental Math (at the second grade level)

Concrete computation (with manipulatives):

Counting forward and backwards by 2, 5 and 10 to 100

Knowledge of timetables 1 - 12, forward and backwards

Grouping by tens

Recognizes odd and even numbers

Grasps the concept of zero

Place value through hundreds

Place value through thousands

Addition, sums through 144

Subtraction, minuends through 144

Multiplication, products through 144
Division, dividends through 144
Column addition and subtraction without carrying and borrowing
Time: natural cycles of the year, seasons, day, night, and month
Ability to work arithmetic problems on paper

WORK HABITS
Spatial Awareness: Ability to use whole page when writing or drawing
Ability to follow instructions
Quality of finished work
Ability to complete assignments in a timely manner
Level of motivation/interest for doing work
Use of imagination
Respectful of class by raising hand or waiting for turns
Care for materials (crayons, paper, books, etc.)
Ability to work independently
Ability to work with a group of peers
Focus and attention
Participation

GENERAL SKILLS
Balance and coordination
Throwing and catching
Ability to stand upright
Ability to imitate
Distinguish right from left
Stamina
Demonstrates self-control
Spatial orientation of self in relation to others
Good sportsmanship
Spatial orientation of self in relation to others
Coordination of fingers with flute playing
Quality of control with artistic lessons
Interaction/Respect with peers
Interaction/Respect with adults
Classroom behavior

Grade 3

- LANGUAGE ARTS
  - Ability to recognize high-frequency words (common use words)
  - Ability to copy text from blackboard onto paper
  - Ability to spell assigned words correctly within a sentence
  - Ability to create a sentence from a story review
  - Cursive writing or Handwriting
  - Knowledge of consonant and vowel sounds (blends, digraphs, etc.)
  - Recognizes nouns, verbs, adjectives, and adverbs (in form taught)
  - Accuracy in taking dictation or in original writing
  - Ability to write simple words and complete sentences
  - Age appropriate vocabulary
  - Oral participation (including review and discussions)
  - Understanding of sentence structure and basic grammar rules
  - Spelling at grade level
  - Ability to read fluently and expressively
  - Reading at grade level
  - Speech/recitation/clear articulation/expression
  - Memory for stories as expressed orally

- ARITHMETIC
  - Ability to work arithmetic problems mentally
  - Recognize and write numbers up to millions
  - Comprehension of place value through hundred thousands
  - Identify seasons, months, weekdays, and year
  - Estimation
  - Recognize the time on an analog clock
  - Work with time based word problems
  - Able to recognize and work with basic linear measurements
  - Able to recognize and work with basic volume measurements
Overall math accuracy
Knowledge of addition facts
Knowledge of subtraction facts
Knowledge of multiplication tables 1-12, randomly
Knowledge of division as presented
Knowledge of short division as presented
Comprehension of carrying (+)
Comprehension of carrying (x)
Comprehension of borrowing (-)
Ability to work arithmetic problems on paper

WORK HABITS
Spatial Awareness: Ability to use whole page when writing or drawing
Ability to follow instructions
Quality of finished work
Ability to complete assignments in a timely manner
Level of motivation/interest for doing work
Use of imagination
Respectful of class by raising hand or waiting for turns
Care for materials (crayons, paper, books, etc.)
Ability to work independently
Ability to work with a group of peers
Focus and attention
Participation

GENERAL SKILLS
Balance and coordination
Throwing and catching
Ability to stand upright
Ability to imitate
Distinguish right from left
Stamina
Demonstrates self-control
Good sportsmanship
Spatial orientation of self in relation to others
Coordination of fingers with flute playing
Quality of control with artistic lessons
Interaction/Respect with peers
Interaction/Respect with adults
Classroom behavior

Grade 4

- LANGUAGE ARTS
  - Given an oral story can compose a synopsis of all or part of it
  - Can compose a synopsis of all, or part, of a story "on their own".
  - Can outline main ideas of a written or oral presentation through expository, narrative and letter writing styles.
  - Is able to identify simple declarative, interrogative, exclamatory and imperative sentences
  - Has retained an understanding of parts of speech including nouns, verbs, adjectives, adverbs, prepositions, articles and conjunctions
  - Student is able to identify, with help of teacher, any misspellings that have occurred in their writing
  - Can spell words from weekly spelling list including common sight words
  - Recognizes "word families" and can collect a list of "word families"
  - Can alphabetize words as a precursor to the use of a dictionary
  - Can indicate understanding of vocabulary words through oral exercises
  - Can correctly copy text from the board and proofread copied text
  - Shows a developing skills in word recognition, word attack, comprehension, fluency, intonation and expression
  - Can identify sounds for letter combinations and word attack skills
  - Uses composition skills to execute a story scheme; plot, setting, and mood
  - Engages in recreational reading and completes book reports as well as silent reading during school hours.
  - Can recall stories or events in sequence and with accuracy
Presents oral reports with skillful use of language and careful organization of spoken material

- **ARITHMETIC**
  - Mental math (At the fourth grade level):
    - Shows mastery of four processes
    - Can compare and contrast using whole numbers and fractions
    - Has developed skills in rounding off, using whole numbers and fractions
    - Compares fractions
    - Finds common denominators
    - Can convert mixed fractions
    - Using the four processes, student can solve problems with fractions and lowest terms
    - Grasps concepts of area and perimeter
    - Can identify and apply appropriate units to specific problems of measurement
    - Understands time and money as units of measurement
    - Given appropriate curriculum story problems, student can choose and write formula representation of the mathematical aspects of the story
    - Given a formula representation, student can write a vertical representation of the problem

- **SOCIAL STUDIES**
  - Student can draw freehand maps of local areas and the regions of the state, noting places of interest and importance
  - Shows an understanding between geography and socio/economic development
  - Can identify major regions, land formations and bodies of water within the state of North Carolina
  - Demonstrates a knowledge of the indigenous inhabitants of North Carolina, their history and culture

- **SCIENCE**
  - Student shows understanding of a range of animals from an ecological, physiological and behavioral perspective
  - Ability to categorize elements of nature into similar or dissimilar groups
Shows an understanding of animals as they relate to the human head, lung, circulatory and metabolic systems

- **WORK HABITS**
  - Spatial Awareness: Ability to use whole page when writing or drawing
  - Ability to follow instructions
  - Quality of finished work
  - Ability to complete assignments in a timely manner
  - Level of motivation/interest for doing work
  - Use of imagination
  - Respectful of class by raising hand or waiting for turns
  - Care for materials (crayons, paper, books, etc.)
  - Ability to work independently
  - Ability to work with a group of peers
  - Focus and attention
  - Participation

- **GENERAL SKILLS**
  - Balance and coordination
  - Throwing and catching
  - Ability to stand upright
  - Ability to imitate
  - Distinguish right from left
  - Stamina
  - Spatial orientation of self in relation to others
  - Coordination of fingers with flute playing
  - Quality of control with artistic lessons
  - Interactions with peers
  - Interactions with adults
  - Classroom behavior

**Grade 5**

- **LANGUAGE ARTS**
  - Writing – Ability to:
Write complete thoughts
Express main themes
Develop story
Reading:
Fluid oral reading
Confident reading
Comprehension
Grammar – Ability to use:
Complete sentences in declarative, interrogative, exclamatory and imperative form
Use correct punctuation
Capitalization
Editing for simple mistakes
Eight parts of speech and articles
Spelling:
Retains spelling words and uses correctly in compositions
Able to identify and use guide words to find a word in a dictionary
Speech and Recitation:
Participation
Articulation
Expressiveness
ARITHMETIC
Word Problems (Wide variety and type; situational, money, time, etc.)
Math facts:
Addition
Subtraction
Multiplication
Division
Overall accuracy
Ability to work arithmetic problems mentally
Fractions:
Raising and lowering terms
Converting between mixed numbers and fractions
Comparing fractional values
Addition and Subtraction of fractions
Multiplication of fraction
Division
Decimals and using decimal point

WORK HABITS
Level of motivation/interest in work
Use of imagination in work
Ability to follow instructions
Ability to work independently
Timely completion of assignments
Preparedness and care with materials
Focus, attention and observational skills
Able to complete and return homework on time
Participation

APPEARANCE OF WORK
Overall neatness
Use of margins
Use of whole page when writing and drawing
Handwriting
Quality of finished work

BEHAVIOR AND SOCIAL SKILLS
Respect & courtesy with teacher
Respect & courtesy with classmates
Ability to listen
Memory for raising hand to make contribution to class
Ability to work without disturbing others

Grade 6

LANGUAGE ARTS
Writing – Ability to:
Use proper sentence structure
Express main themes
Segment writing using paragraphs
Proofread
Develop story
Reading:
Fluid oral reading
Confident reading
Comprehension
Grammar – Ability to use:
Complete sentences in declarative, interrogative, exclamatory and imperative form
Use correct punctuation
Capitalization
Editing for simple mistakes
Eight parts of speech and articles
Spelling:
Spell 80% assigned words correctly
Retains spelling words and uses correctly in compositions
Able to use any reference material (Dictionary, Thesaurus, etc.)
Speech and Recitation:
Participation
Articulation
Expressiveness

• ARITHMETIC - Knowledge or Ability with:
Whole Numbers:
Math facts
Addition
Subtraction
Multiplication
Division
Word problems
Ability to work arithmetic problems mentally
Fractions/Decimals/Percentages:
- Whole numbers and decimal conversion
- Addition and Subtraction with complex fractions
- Multiplication and Division with complex fractions
- Percentages (conversion to fraction and/or decimal)
- Math processes with percentages

Geometry
- Familiarity and use of geometrical instruments
- 6 - Division of a circle
- Identification of geometrical shapes and names

WORK HABITS
- Level of motivation/interest in work
- Use of imagination in work
- Ability to follow instructions
- Ability to work independently
- Timely completion of assignments
- Preparedness and care with materials
- Focus, attention and observational skills
- Able to complete and return homework on time
- Participation
- Ability to help others

APPEARANCE OF WORK
- Overall neatness
- Use of margins
- Use of whole page when writing and drawing
- Handwriting
- Quality of finished work

BEHAVIOR AND SOCIAL SKILLS
- General courtesy with teacher
- General courtesy with classmates
Grade 7

- LANGUAGE ARTS
  - Writing:
    - Given an oral story can compose a synopsis independently
    - Able to write short creative examples from a given prompt
    - Able to brainstorm when commencing a writing assignment
    - Able to create work from an outline
    - Able to use composition skills to execute a story scheme (plot, setting, mood, characterization, and foreshadowing)
    - Able to compose and complete a research report of several pages
  - Reading:
    - Able to recall stories accurately and in sequence
    - Interpret written content and instructions of given material
    - Overall comprehension with assigned reading material
    - Read aloud with fluency, intonation, and expression of comprehension
    - Able to give oral and written reports that demonstrate knowledge of material
    - Engages in recreational reading across multiple genres
  - Grammar:
    - Identify declarative, interrogative, exclamatory and imperative sentences
    - Identify all parts of speech
    - Able to proofread and correct own work
    - Editing for simple mistakes
    - Paragraph creation
    - Possessive pronouns
    - Verb Tenses
    - Prepositional phrases
    - Contractions
    - Able to use all basic grammar skills (capitalization, commas, punctuation, etc.)
  - Spelling
• Retains spelling words and uses correctly in compositions
• Able to use any reference material (Dictionary, Thesaurus, etc.)
• Speech and Recitation:
• Participation
• Articulation
• Expressiveness

• SOCIAL STUDIES
  ○ History:
  • Can listen and follow attentively to a 30+ minute presentation
  • The following day:
    ▪ can verbally recall material presented
    ▪ can write brief review of material
    ▪ Can take notes independently
    ▪ Can write a short descriptive essay from given material
    ▪ Can produce a creative writing piece inspired by given content
    ▪ Can produce factual writing piece based on given content
    ▪ Understands timeline of period
    ▪ Understands historical context of period
    ▪ Can research given topic independently
    ▪ Can illustrate theme, using various media including pencils, pastels and paint
    ▪ by copying given subject
    ▪ by creating original artwork
    ▪ Can produce report on given topic
    ▪ Can present report to class
    ▪ Can answer questions demonstrating knowledge of a given topic
    ▪ Can work cooperatively with others to create joint report
  ○ Geography:
  • Can demonstrate understanding of different landscapes and climates
  • Can demonstrate understanding of different cultures
  • Can produce accurately drawn map using a grid method
  • Can produce reasonable freehand rendition of a given area being studied
  ○ Science:
• Able to observe a scientific demonstration/experiment accurately and carefully
• Able to verbally review demonstrations and/or experiments accurately and carefully immediately afterwards
• Able to verbally or in written form review demonstration and/or experiments accurately and carefully the following day
• Able to write up accurate and comprehensive description of demonstrations and/or experiments including materials used, procedure followed and observations made
• Able to draw accurate and comprehensive diagrams and/or pictorial renditions of demonstrations and/or experiments

● ARITHMETIC
  0 Can work with exponents
  0 Understands both metric and imperial measurement
  0 Can convert between metric and imperial system of measurement
  0 Can work with percentages
  0 Can work with ratios
  0 Can work ratio and similar figures
  0 Understands irrational numbers
  0 Understands repeating decimals
  0 Can work with the number ‘pi’
  0 Understands positive and negative numbers
  0 Understands terminology of Algebra
  0 Can simplify Algebraic expressions
  0 Understands order of operations
  0 Can evaluate Algebraic expressions
  0 Understands use of equal signs
  0 Knows and can work with the area and perimeter formulae
  0 Can work with word problems including measurement, average rate of speed, and compound interest
  0 Understands and can work with the Pythagorean theorem

● WORK HABITS
  0 Level of motivation/interest in work
Use of imagination in work
Ability to follow instructions
Ability to work independently
Timely completion of assignments
Preparedness and care with materials
Focus, attention and observational skills
Able to complete and return homework on time
Participation
Ability to help others

● APPEARANCE OF WORK
Overall neatness
Use of margins
Use of whole page when writing and drawing
Handwriting
Quality of finished work

● BEHAVIOR AND SOCIAL SKILLS
General courtesy with teacher
General courtesy with classmates
Ability to listen
Memory for raising hand to make contribution to class
Ability to work without disturbing others

Grade 8
● LANGUAGE ARTS
  Writing:
  Given an oral story can compose a synopsis independently
  Able to write short creative examples from a give prompt
  Able to brainstorm when commencing a writing assignment
  Able to create work from an outline
  Able to use composition skills to execute a story scheme (plot, setting, mood, characterization, and foreshadowing)
  Able to compose and complete a research report of several pages
Able to write a substantial report on a chosen topic (the 8th grade project)
Able to make succinct oral presentation to a public audience (8th grade project)

**Reading:**
- Able to recall stories accurately and in sequence
- Interpret written content and instructions of given material
- Overall comprehension with assigned reading material
- Read aloud with fluency, intonation, and expression of comprehension
- Able to give oral and written reports that demonstrate knowledge of material
- Able to give articulate oral version of written report that demonstrates knowledge of material
- Engages in recreational reading across multiple genres

**Grammar:**
- Identify declarative, interrogative, exclamatory and imperative sentences
- Identify all parts of speech
- Able to proofread and correct own work
- Editing for simple mistakes
- Accurate with underlining, italicizing and quotation marks
- Paragraph creation
- Identify and use suffixes and prefixes
- Recognize root words
- Possessive pronouns
- Verb Tenses
- Prepositional phrases
- Able to identify subordinate clauses, both dependent and independent
- Contractions
- Able to use all basic grammar skills (capitalization, commas, punctuation, etc.)
- Spelling:
  - Spell 80% assigned words correctly
  - Retains spelling words and uses correctly in compositions
  - Able to use any reference material (Dictionary, Thesaurus, etc.)
- Speech and Recitation:
- Participation
SOCIAL STUDIES

- History:
  - Can listen and follow attentively to a 30+ minute presentation
  - The following day:
  - Can verbally recall material presented
  - Can write brief review of material
  - Can take notes independently
  - Can write a short descriptive essay from given material
  - Can produce a creative writing piece inspired by given content
  - Can produce factual writing piece based on given content
  - Understands timeline of period
  - Understands historical context of period
  - Can research given topic independently
  - Can illustrate theme, using various media including pencils, pastels and paint
    - by copying given subject
    - by creating original artwork
  - Can produce report on given topic
  - Can present report to class
  - Can answer questions demonstrating knowledge of a given topic
  - Can work cooperatively with others to create joint report

- Geography:
  - Can demonstrate understanding of different landscapes and climates
  - Can demonstrate understanding of different cultures
  - Can produce accurately drawn map using a grid method
  - Can produce reasonable freehand rendition of a given area being studied

- Science:
  - Able to observe a scientific demonstration/experiment accurately and carefully
  - Able to verbally review demonstrations and/or experiments accurately and carefully immediately afterwards
Able to verbally or in written form review demonstration and/or experiments accurately and carefully the following day

Able to write up accurate and comprehensive description of demonstrations and/or experiments including materials used, procedure followed and observations made

Able to draw accurate and comprehensive diagrams and/or pictorial renditions of demonstrations and/or experiments

Able to draw conclusions from observation made

**ARITHMETIC**

Simplify numerical expressions and evaluate algebraic expressions.

Simplify expressions with or without grouping devices.

To find solution sets of equations over a given domain.

Translate phrases into variable expressions.

Translate word sentences into equations.

Translate simple word problems into equations.

Use the five-step plan to solve word problems over a given domain.

Graph real numbers on a number line and compare real numbers.

Use opposites and absolute values.

Use number properties to simplify expressions.

Add real numbers using a number line or properties of opposites.

Add real numbers (positive and negative) using rules for addition.

Subtract real numbers (positive and negative) and to simplify expressions involving differences.

Use the distributive property to simplify expressions.

Multiply (positive and negative) real numbers.

Write equations to represent relationships among integers.

Simplify expressions involving reciprocals.

Divide real numbers (positive and negative) and to simplify expressions involving quotients.

Solve equations using addition or subtraction.

Solve equations using multiplication or division.

Solve equations by using more than one transformation.

Use the five-step plan to solve word problems.
Solve equations with the variable on both sides.
Organize the facts of a problem in a chart.
Solve problems involving cost, income or value.
Solve statements in algebra.
Write and simplify expressions involving exponents.
Add and subtract polynomials
Multiply monomials.

● WORK HABITS
Level of motivation/interest in work
Use of imagination in work
Ability to follow instructions
Ability to work independently
Timely completion of assignments
Preparedness and care with materials
Focus, attention and observational skills
Able to complete and return homework on time
Participation
Ability to help others

● APPEARANCE OF WORK
Overall neatness
Handwriting
Quality of finished work

● BEHAVIOR AND SOCIAL SKILLS
General courtesy with teacher
General courtesy with classmates
Ability to listen
Memory for raising hand to make contribution to class
Ability to work without disturbing others
Foreign Languages

Spanish, German

Our foreign language program includes two languages, Spanish and German, and develops throughout eleven years of study. Currently, both languages are taught from Grades 1-7, and Spanish continues in grades 8-11. The active plan is to add eighth grade German in 2015/16 and then continue building this program up through eleventh grade in the following years. Foreign language learning not only introduces children to other peoples’ way of thinking and feeling, it also cultivates inner sense and tolerance of and openness to other cultures, helping children to become globally attuned. It also improves their relationship to and command of their own mother tongue.

Each language arises out of a different human experience. The exposure to two contrasting languages such as German and Spanish at an early age balances the one-sidedness of the mother tongue, helping develop flexibility in the child’s own thinking and feeling. These qualities are in addition to the natural acquisition of the vocabulary and grammar that are obtained and built upon through the years.

In Grade School two periods per week are given each to German and Spanish. In Grades 8-11 our students take Spanish for three periods per week.

Lower School Methodology

Grades 1-3

The children are exposed to two foreign languages at this early age mainly to make use of the great imitative forces still working in them, which help them absorb the qualities, values and accurate pronunciation of the languages. An enhanced feeling for language, including their mother tongue, is one result of early exposure to the learning of foreign languages.

From Grades 1-3, the experience of the foreign languages is completely oral. Through traditional and action songs, dances, verses, rhymes, games, pantomime, drama and short stories the children receive a whole language experience. Simple stories told in the foreign language offer multiple practice opportunities such as acting out scenes, playing question/answer games, and retelling/comprehension practice. Games reinforce vocabulary acquisition. The children feel, act and live into the language, connecting with every aspect in an unconscious, playful and lively way.
Grades 4-5
This is a time of transition towards our Middle School program. Writing and reading are now added to the oral learning of the language. Initially this is done through writing familiar material and then reading it. By fifth grade reading skills are being expanded to be able to read new, simple stories directly. Stories told in the foreign language continue to offer multiple practice opportunities and are expanded upon through exercises such as short dictations, creation of vocabulary lists, discovery of grammar rules, and writing summaries.

Grades 6-8
During the Middle School years, the intellectual capacities are unfolding in the child. Foreign language slowly becomes a skills class that requires consistency, practice and analytical thinking for success. During these years, the children learn how to consciously apply rules of grammar, syntax and daily oral expression. They create personal notebooks of vocabulary lists and grammar rules, in addition to lesson books in which they copy and illustrate cultural material. The children memorize ballads, hear and read dramatic stories, sing songs from specific regions, and learn about traditions and customs. These feed the children’s active interest in the other cultures.

High School
In Grade 9 a textbook may be introduced at the discretion of the teacher. This can help the students organize the knowledge they have already gained, and enlarge their grasp of grammar. Other tools used to achieve this goal include teacher generated worksheets and notes that students record in their notebooks for use in individual study. We continue our journey into the culture of the foreign language through literature, poetry, history, and classic and contemporary music. Independent reading can be expected, ranging from children’s books in Grade 9 to chapter books in Grade 11. Each grade includes individual and group projects (e.g. debates, dramatizations) and original writings in the language (e.g. poetry, brochures and picture books).

Through various methodologies the teacher brings to the awareness of the 9th grader: What can language do? They review all main elements of previously acquired grammar and rebuild active vocabulary to understand it anew in fresh context.
The Grade 10 theme is: How does language work? Origins and history of the Spanish language are explored and compared to other languages; the students debate topics that are meaningful to them; and modern culture is explored through song, magazines, and current political topics. Qualities of the language are explored through studying literature from several time periods. Grammar review continues, and the subjunctive mode is introduced.

The Grade 11 theme is the beauty and power of language. Students study and recite great poets from various periods and write their own poetry. Analysis of classic and modern literary texts is approached through theme, not just content.

At the end of the students’ Waldorf learning of foreign languages they have been exposed to a large repertoire of vocabulary, practiced consciously applying grammar rules; developed conversational abilities, and developed an ability to grasp overall meaning in both written and oral communication. They have also achieved a thorough feeling for and understanding of the people, their culture, customs, thoughts and actions, which will help our students to become world citizens in the widest and deepest sense.

**Student Learning Expectations**

**Grade 1**

- Establish a feeling for the sound world of the language
- Establish a feeling of the “soul” of the people, language, and culture through games, poems, verses, stories, and songs, including seasonal songs/stories/poems
- Gain recognition of vocabulary families such as colors, classroom items, parts of the body, numbers 1-20, clothing, nature words and family members
- Respond to simple commands associated with action verbs
- Be able to answer basic questions such as their name, age and family members
- Comprehend short stories told in the target language

**Assessment**

- Teacher observes clarity and accuracy of language pronunciation and expression in the group and individually (in verses, songs, games)
- Observation of comprehension during games
• Observation of how well children follow simple commands
• Observation of children answering simple questions as a group and individually

Grade 2
• Continue to build and improve all skills learned in Grade 1
• Review familiar verses and songs, adding additional repertoire
• Review and gain command of vocabulary families introduced before, with expanding details
• Listen to and comprehend small stories and fables; act out parts
• Learn the days of the week, months, seasons, dates, numbers to 100, simple arithmetic in all four processes
• Understand commands and requests to carry out small tasks in the classroom environment
• Respond individually to simple questions as in Grade 1, expanding details to include new vocabulary topics

Assessment
• Same as First Grade
• Teacher dictates and the children show comprehension through drawing a picture.

Grade 3
• Review conversational themes from Grades 1-2, with increased focus on asking others questions
• Be familiar with and able to respond to questions about: numbers up to the 1000s, dates, increasingly complex arithmetic problems, additional colors, places (town, farm), animals, weather, seasons, clothes, forms of transport, telling time, more complex commands, items of food (especially fruits and vegetables relating to farming), professions, and simple stories
• Act out individual parts of short, dramatized stories
• Comprehend prepositions
• Learn and use question words
• Learn personal pronouns in context
• Use conjugated verb forms through imitation, in preparation for Grade 4 grammar work
• Continue to learn songs by heart; rounds are introduced in the second semester
• Master tongue twisters that focus on particular combinations of letters and precise pronunciation

Assessment
• Same as Second Grade, with consideration of new vocabulary and complexity
• Picture dictations with increasing complexity
• Number dictation
• Small dialogues with teacher and other students

**Grade 4**

• Continue to learn and recite seasonal and nature poems
• Review and expand vocabulary families learned in Grades 1-3, now writing vocabulary lists
• Practice known songs and learn new songs, especially rounds
• Learn the German and Spanish alphabets and be able to spell familiar words
• Become familiar with spelling according to the pronunciation rules introduced
• Accurately copy texts from the chalkboard
• Read aloud written texts on the board and in hand-written book, following pronunciation rules
• Increase conversation skills through active listening and participation in oral drills
• Be able to give simple descriptions, questions, answers and commands in full sentences
• Recognize nouns, verbs, adjectives, common prepositions and personal pronouns
• Recognize present tense verb conjugations, respond orally using the correct conjugation, and develop a rudimentary understanding of when and how the endings change

**Assessment**

• Same as Third Grade, with consideration of new vocabulary and complexity
• Observation of individual ability to maintain pace and accuracy in writing
• Pronunciation and clarity when reading out loud individually, and ability to read with the group

**Grade 5**

• Continue to review and learn new seasonal and folk songs as rounds and in parts
• Continue to learn authentic poetry; proverbs are introduced
• Increase comprehension of stories
• Read a printed reader both in group and individually
• Begin practicing skills of seeking information in texts to answer simple questions
• Be able to retell small portions of a story freely
• Be able to recognize the present, past and future tense of the verbs learned
• Continue to practice individual use of present tense conjugations both orally and written
• Learn the rules and common examples of modal verbs in both German and Spanish
• Be aware of the difference in sentence structure in German, Spanish and English
• Increase vocabulary and conversational phrases, continuing to compile vocabulary lists
• Know common figures of speech
• Become familiar with traditions, customs, songs and folktales from Mexico in the Spanish lessons

Assessment
• Same as Fourth Grade, with consideration of increased complexity and individualization
• Written dictations including spelling and definition of vocabulary
• Small quizzes

Middle School

Grade 6
• Review and consolidate knowledge from Grades 4-5: vocabulary, grammar and conversation skills
• Develop good work habits with regard to homework, regular review of material and focus in class
• Gain a clear understanding of grammar terminology
• Understand content and significance of heroic poetry (ballads)
• Continue reading practice with stories that are humorous, thought-provoking or adventurous
• Practice comprehension with regular retelling in English. Continue to summarize in German/Spanish, with less guidance than previous years, or through complex questions
• German: become familiar with the present perfect tense and begin to comprehend the declension of nouns (especially the direct and indirect objects). Begin to comprehend the difference between Active and Passive Voice and practice individual written skills.
• Spanish: become familiar with the simple past tense (preterite) and master the conjugations, making initial progress towards switching between tenses in oral and written drills. Recognize and use future tense verbs. Master grammar rules of personal pronouns and articles.
• Consistently practice oral drills on varied conversation topics in order to be able to speak more freely about oneself and one’s environment
- Learn the following about Spain, Germany, Switzerland and Austria: Geography, cities, local traditions, foods, dialects, folk songs, and some historical perspective related to Main Lesson topics such as medieval heroes and Roman influence.

**Grade 7**

- Review and further solidify grammar and vocabulary from previous years with an emphasis on freely switching between present and past tense.
- Spanish: Learn the imperfect past tense, progressive tense and informal, affirmative commands, reflexive verbs and pronouns, irregular verb conjugations (tener, ir, ser).
- German: Add the conjugation of adjectives to the conjugation of nouns. Begin to write small essays in German, using adjectives in the endeavor to create rich, colorful language.
- Continue to learn new ballads, short stories and songs from multiple German/Spanish speaking countries.
- Spanish: Continue to learn geographical, cultural, historical themes in Spain focusing on Renaissance period, and begin to explore Latin American geography and culture following the Main Lesson blocks on exploration and conquest. Become familiar with indigenous people that were affected by the conquest and explore their point of view.
- German: Culturally explore the differences of traditions in Austria, Germany and Switzerland. Geographically work on the differences of the flat North of Germany, the hilly middle section and the dramatically mountainous regions of the South of the German speaking countries.
- Practice working with two-language dictionaries and practice simple translations.
- Continue increasing reading comprehension, retelling key elements of stories in the target language and answering simple questions about text in German/Spanish.
- Read a dramatic play that incorporates a historical element and act it out with individual parts.
- Improve conversation skills through review and adding new vocabulary families such as: daily routines and chores, new verbs from texts practiced in several tenses.

**Grade 8**

- German: Most written and oral skills will be the same as Spanish, when German is reinstated.
- Spanish: Review all previously studied vocabulary families and grammar.
- Review all previously learned verb tenses and irregular verbs: preterite and imperfect past, present, present progressive, modal verbs, future, and affirmative informal commands.
- Learn the conjugations for the conditional tense and begin to practice in common phrases.
- Learn differentiation between ser and estar and when to use each one.
• Become familiar with spelling changes in stem change verbs.
• Recognize the present perfect, learn the rules to create this tense and memorize the irregular verb conjugations for haber, which is needed to form this tense.
• Recognize indirect and direct object pronouns and their place in sentence structure
• Continue to develop and hone independent writing skills, creating original paragraphs using target vocabulary and/or grammar concepts
• Continue to expand reading comprehension and fluency in reading, using longer, more complex stories, and refine the ability to understand intricate literary passages holistically
• Improve conversational skills using practical vocabulary such as interrogatives, giving directions, ordering food, asking and answering questions without prompting during improvised group dialogues
• Learn the following about Latin America: Revolutionary biographies, capitals and foods of South American countries, modern traditions, and popular folk and contemporary songs. Spain’s civil war may be explored briefly through literary figures and poetry, in relation to the Main Lesson block on modern history.

Grades 6-8 Assessment
• Quizzes
• Dictations
• Oral Activities (Conversation, Dialogues, Recitation, Plays, etc.)
• Homework

High School

Grade 9 (Spanish 2)
• Master Middle School grammar through comprehensive review of rules, ideally in a light, humorous way, revisiting verb tenses in new contexts with new vocabulary, adding deeper intellectual analysis
• Learn scenes of dramatic or humorous nature, read newspaper extracts and form opinions, read biographies about reformers, discoverers or inventors
• Review dictionary work
• Create an original story and incorporate new and learned grammar and vocabulary
• Perform dialogues and short plays
• Deepen conversational skills through oral practice in each lesson, focusing on everyday situations

**Grade 10 (Spanish 3)**

• Deepen awareness of the traditions and ways of life in Spanish-speaking countries through study of modern youth culture, contemporary music and newspaper excerpts.
• Practice conversational skills through discussing modern themes, biographies or countries
• Reading materials about the same topics
• Learn vocabulary to formulate agreements and disagreements, and practice oral and written debates on specific topics
• Analyze parts of sentences
• Recognize and become familiar with the sentence structure, conjugations and use of the subjunctive mode

**Grade 11 (Spanish 4)**

• Consciously practice incorporating correct, beautiful, powerful and persuasive speech in all conversational drills, dialogues and oral presentations
• Study great poets from various periods, continue to memorize poetry and recite individually, presenting self-chosen pieces
• Memorize and present scenes from plays
• Read independently a chapter book and write summaries in Spanish
• Read texts from 17th-20th centuries, and continue to read modern newspaper passages
• Practice aesthetic judgment through analysis of modern and classic literary texts
• Review previously learned grammar as it appears in literary context
• Learn the passive voice
• Continue to explore new examples of where to use the subjunctive mode

**Grade 9-11 Assessment**

• Teacher observations of active listening and oral response during lesson participation
• Individual writing assignments
• Grammar worksheets
• Periodic skills quizzes
• Unit tests, incorporating listening, speaking, reading comprehension, written expression
Visual Arts

The Role of the Arts in Waldorf Education

The arts in general have a specific role to play in a Waldorf School. Rudolf Steiner recognized that artistic work in music, poetry, drawing, painting and sculpture was an essential part of becoming a whole human being. While learning skills in any of these areas may have practical usefulness in life and culture, it is the soul qualities experienced when engaged in artistic activity that Steiner saw as critical. When students take in material through the intellect, there is comprehension. When they make art, they experience creative freedom, an activity of the soul. If education assists in building capacities as a full human being, then artistic work is as essential as intellectual and physical work. A Waldorf School educates the mind, the body and the soul; hence, the arts are an integral part of the whole education.

Lower School

In Early Childhood and Lower School, teachers bring to the children a love for the arts that transcends mere technical ability. The material is brought to life with an enthusiasm and appreciation for its ability to awaken the child’s inner intelligence for a full life. The sensitivities developed through artistic work permeate learning, observation, and skill building. When the educational experiences of a young child are imbued with artistic work, the education is incorporated into the soul and the child’s living connection to the unseen spiritual world remains alive.

High School

In adolescence, the role of the arts in education shifts. Where in the Lower School the imaginative forces at play come to the child from the soul-spirit realm of fantasy, in High School those forces are transformed into the intellect and practical skills. The imagination must now be drawn from the adolescent’s inner soul, thus taking on a new quality of individuality. Exercising the imagination through creative expression, exploration and self-discipline allows adolescents to feel free in their own uniqueness. The creation of art as a human endeavor is at the core of the Waldorf curriculum. The visual arts, drama, poetry, music and architecture each offer unique qualities that speak to the hearts of
adolescents at particular stages in their development. Hence the block offerings in Grade 9 of History through Art and Comedy and Tragedy; in Grade 10 of History through Poetry and Sophomore Class Play; in Grade 11 of History through Music; and in Grade 12 of History through Architecture and Senior Class Play.

**Visual Arts in the High School**

In the High School, students work with teachers who are experts in their fields. Art is studied as a separate discipline, with a specific body of knowledge, skills and requirements. Adolescents gain insight into their own creative capacities by refining their technical skills and intellectual understanding of material and form. The goal is not to turn all students into artists but rather for students to develop a strong relationship to their own creative capacities and experience themselves as artistically capable in a variety of media. Drawing, painting, and sculpture all have qualities and requirements that speak to particular developmental stages of teenagers and are therefore brought at specific times with particular pedagogical aims.

**Two-Dimensional Media: Painting**

Students in a Waldorf School experience color through painting beginning in early childhood. Steiner’s indications and a teacher’s methodology are fed by the perspectives on color expressed by Johann Wolfgang von Goethe in his *Theory of Colour*. Through the use of watercolor, students at an early age come to have a feeling for the objective psychological qualities that are inherent in color. Initially, student paintings are formless expressions of colors’ many moods, done in the wet-on-wet technique. As the children grow, form begins to emerge out of the child’s feeling for the color and its relationships to other colors. Basic shapes become recognizable archetypal images, but always the emphasis is upon a sympathetic relationship to the true nature of color rather than bending color to fit the form. By Grades 7 and 8, students are ready to work more objectively, with a more sophisticated palette, tools and methods.

The intense and changing moods of the adolescent make color an ideal vehicle for teenage expression. Working with the seemingly infinite variety of colors available in painting has a liberating quality that allows adolescents to orient to their own individuality. While Grade 9 is predisposed to work with materials that are limited in color (see explanation below) Grades 10, 11 and 12 each benefit from painting’s therapeutic qualities. In addition, High School students refine their painting skills and come to know color as a dynamic artistic phenomenon that can be mastered.
Two Dimensional Media: Drawing

Drawing, while important throughout the High School art curriculum as the foundation of two-dimensional art, also has a specific mission in the Grade 9 year. The polarities of light/dark and black/white meet the 9th Grader exactly where they are on a soul level. The 9th Grader is prone to absolutes and extremes; the harsh, either/or conclusion one must make in black and white drawing mirrors that finality of judgment. Initially, the young student of drawing realizes that these opposites need each other in order to find fruitful form. As materials, skills and observation become more sophisticated, the student realizes that between the poles of black and white there are infinite shades of gray. Discernment and more careful observation now must be used to find those strokes that deserve emphasis and those that should be diminished. Once the students develop a feeling for these subtleties, they have reached a certain level of mastery with the medium. This skill path in drawing reflects the soul path of the adolescent: Grade 9, polarities; Grade 10, at sea with possibilities (the journey between); Grade 11, discernment and prioritizing; Grade 12, knowledge, control, artistic freedom.

Grade 9

Students in Grade 9 are particularly prepared to examine the complementary qualities of opposing forces and this is what black and white drawing offers. Using a variety of high-contrast drawing materials, students study the way light and shadow comes together to reveal form and space in observable and imaginative ways. Beginning with charcoal, students learn to distinguish between absolute white, absolute black and the grey areas between where form is revealed. They practice uncovering form and creating an atmosphere of light shining into darkness. Learning to control light and dark enables the student to transforming the flat 2-dimensional surface of the drawing paper into the illusory space of 3 dimensions. Class exercises are opportunities to gain some control over the creation of form, of space and materials. Line is introduced as a further drawing element, in expressive and descriptive capacities. Students continue to hone observational skills by analyzing and drawing simplified geometric forms as revealed by light and shadow. They look analytically for the six components of light falling across from: light, highlight, shadow, cast shadow, reflective light, and core shadow. Additional practice identifying negative spaces (as opposed to positive form) helps refine observational skills. Learning to control composition became is an additional skill to master. The work of this block results in a final drawing of a still life.
using a mid-tone paper with charcoal and white pastel. Preliminary sketches and studies led up to the final work that demands substantial commitment from each student.

Developing the ability to draw what one sees on 2-dimensional surfaces is a difficult task that cultivates patience, commitment and an ability to focus. It is not unusual for a student to feel challenged in staying with the process. This is a significant part of their class experience and their personal progress is usually a direct result of self-discipline. Each student begins the class with certain drawing skills and a certain level of focus. The aim is that they improve in both areas: their technical facilities and their ability to stay committed through difficulties in order to learn new skills.

**Grade 9 Student Learning Expectations**

- Observation of material form
- Analysis of light and dark encountering form
- Exercise of hand eye coordination through drawing
- Control of materials such as graphite, charcoal, ink
- Control of composition
- Development of self-discipline and ability to focus

**Grade 10**

In Grade 10, students become reacquainted with color in a way that challenges their growing intellect and vibrant feeling life. Students experience and question the dynamics of color as a physical phenomenon and an artistic tool through experiments with prisms and light. They objectively analyze Goethe’s Color Wheel and discuss the qualitative aspects of color. Students experiment with the practicalities of moving color around, blending, mixing and transitioning from one color to the next. Time is devoted to understanding the unique soul qualities colors exhibit alone and in specific relationship to each other. Using watercolor (first wet-on-wet, then later on dry paper) students create abstract explorations of color relationships: complements, split complements, analogous, and hot/cool combinations. Color meditations are a springboard for more expressive paintings in which an individual’s felt relationship to color is encouraged. The relationship between form and color begins with careful objective observations of ordinary objects from nature (e.g. an autumn leaf or spring flower). Landscape then becomes the medium through which they study the dynamics and effects of color in the observable world. Students study the
effects of atmospheric perspective in landscapes by master artists, then observe and paint the
dynamics of light and dark at play in a plein aire location. The goal is to experience and understand
how color is revealed both physically and artistically.

**Grade 10 Student Learning Expectations**

- Analyze observational and felt effects of the visible spectrum
- Understand scientific concepts of the phenomenon of color
- Observe colors' relationships to light, dark and form
- Control a variety of media including colored pencil, pastels and watercolor
- Continue to improve self-control, focus and observation

**Grade 11**

Drawing and painting from the works of master artists such as Michelangelo, Leonardo da Vinci,
Vincent Van Gogh, Andre Derain and others has served as a vehicle for Grade 11 to immerse in the
movement of light and dark and color. With a foundational understanding of both drawing (Grade
9) and painting (Grade 10), the 11th Grader has both the skills and the confidence to seek out more
challenging work. The opportunity to select, study and identify with a specific masterwork allows
adolescent artists to begin to recognize aspects of their own artistic aesthetic. Students are asked to
“step into the shoes” of the artist they study, examine the expressive techniques and question
artistic choices. First, students look closely at works of charcoal, graphite or ink, working with great
concentration to follow the master’s hand. While this exercises their observational skills and their
ability to reproduce what they see, they also rediscover the power of light and dark to create both
form and a deep, mood-filled space. The study of light and dark serves as a foundation for
understanding the skeletal structure of painting. As a bridge exercise from drawing to full
immersion in painting their chosen work, students learn basic acrylic painting skills by all copying
the same, relatively simple masterwork. This activity serves as a primer for learning about
composition, under-painting, brushes, and the language of color. Though each student works from
a copy of the same painting, it becomes apparent to all that one’s own personality inevitably flows
forth from the brush - whether through varied interpretations of color, expressive brushwork, or
compositional control. With this experience in mind, students then approach the self-chosen
master painting with the confidence not only to reproduce but also to interpret the painting freely
as their own artistic inclinations direct.
Grade 11 Student Learning Expectations

- Understand the relationship between an art work’s structure and its creation
- Hone observation skills and hand-eye coordination
- Demonstrate an ability to identify unseen motives behind an artwork
- Control a variety of drawing and painting media; particularly pencil, ink, watercolor and acrylic paint
- Continue to improve self-control, focus and observation
- Comprehend the artistic experience in bringing a work from beginning to end

Grade 12

By Grade 12, students are ready to look themselves in the eye – literally – and see who is there. The human face and its expressive potential are bravely analyzed through the method of drawing and painting. Students first become familiar with the fundamental forms of the human head through a careful study of ideal proportion. They experiment with different viewpoints of the head and analyze the complexities of the features. Working from observation, students then relate their understanding of proportion and form to what they see in the mirror. This activity requires significant will and a commitment to the process. As students progress from scrutinizing the parts of the face to considering it as a whole and living form, they also deepen their understanding of how to create a sense of volume on the 2-dimensional surface. The task of drawing oneself has the dual difficulty of sharpening one’s observational skills while also seeing oneself clearly. This very internal experience can be complemented with sketching classmates. Portraiture as subject matter is demanding: even the smallest changes can alter a likeness. When drawing each other, students tend to develop both compassion for each other as struggling artists and respect for the challenge of doing something well. As a final act of artistic camaraderie, the class commits to the arduous task of creating 24 different black and white abstract drawings that, when connected in specific order, recreate a 3’x4’ image of each 12th Grader. The process quickly grows repetitive and requires students to willfully stay engaged both in spirit and in execution.

Grade 12 Student Learning Expectations

- Demonstrate understanding of how to draw the 3-dimensional forms of the face in two dimensions
- Demonstrate ability to unify parts to a whole
- Continue to improve self-control, focus and observation
Three-Dimensional Media: Sculpture

Grade 9
In Grade 9, students experience clay as a plastic sculpting material from which can be created both organic and inorganic forms. The goals of this beginning sculpture course are for students to learn the intrinsic laws of clay while recognizing its capabilities and limitations. They begin by creating a near perfect sphere, which challenges their strength, concentration and control. From this point, students work from hard natural forms (a shell or bone) recreating them in clay on a larger scale. This exercise demands not only the ability to handle the clay form but also consistent attention to the details of the subject matter. In similar mode but with even more clay, students then sculpt a life-like human skull by carefully observing a model. As in their drawing, acute observation is the key to success. Thus, students face the challenge of maintaining self-discipline related to their needs and progress in a studio atmosphere that allows one to work at one’s own pace. Each student begins the class with a certain facility with clay and a certain level of focus. What is desirable is that they improve both in their technical aptitude and in their ability to stay committed through difficulties in order to learn new skills.

Grade 9 Student Learning Expectations
• Control clay
• Demonstrate improved hand-eye coordination
• Demonstrate improved self-control, focus and observation

Assessment
• Teacher observation in class
• Portfolio review
• Written reports

Grade 10
Volume, shape, mass, and surface transitions are the primary focus for Grade 10 Sculpture. As students explore the terrain between polarities, they also develop a basis for aesthetic judgment. Through observation and critique, students develop a language both for talking about and manipulating sculptural form. Exercises challenge students to find balance between sculptural
opposites: peaks and valleys, interiors and exteriors, organic and inorganic shapes, curves and angles, concave and convex surfaces. The logic found within this formal language becomes the seedbed for expressive forms. Carefully guided exercises at the beginning of the course are designed to give students a formal foundation upon which they can more freely develop their own artistic sensibilities. The ability to focus when necessary continues to be critical to real progress.

**Grade 10 Student Learning Expectations**
- Control of clay
- Improved hand eye coordination
- Ability to analyze three-dimensional composition
- Continued improvement of self-control, focus and observation

**Assessment**
- Teacher observation in class
- Portfolio review
- Written reports

**Grade 11**
The Human Figure is excellent subject matter for the 11th Grader exploring the relationship of parts to the whole. Observation necessitates the search for the forces at work behind the physical form. Students study the human figure first by making gesture drawings. Searching for the essential lines and movement of the complicated human form, they train their eye to look for the energy and movement of the living body. Students learn to discern the skeletal and muscular structures that support what they see at the surface as they begin work from life, sculpting a representation of a reclining model. This experience pushes students to look at the finer relationships of human form that determine proportion and a feeling of mass in relation to gravity. The project hones observational and clay modeling skills. In addition to working from observation, the students also focus on the expressive potential of the human body. Clay is shaped into abstract gestures that suggest particular expressive qualities. Combining the expressive with the observable, students create clay figures that defy gravity, succumb to gravity and/or are balanced between. As a final project, students uncover an imagined figure living within a large chunk of clay. This activity engages imagination, knowledge of the human figure and the students’ ability to transform a non-objective form into an objective one while maintaining the essential living quality within the clay.
Grade 11 Student Learning Expectations

• Control of clay
• Improved hand eye coordination
• Analysis of 3-dimensional composition
• Continued improvement of self-control, focus and observation
• Ability to recognize and express intuitive, imaginative and perceived forces at work

Assessment

• Teacher observation in class
• Portfolio review
• Written reports

Grade 12

In Grade 12, students are prepared to take up the complexity of modeling a life-sized human head. In the contemplation and execution of this and supporting activities, students experience the hard, fixed material of the observable world and the more malleable and expressive aspects of the invisible creative forces that shape it. They thus find a balance between the two, resulting in an expression of the human head that is both universal and unique.

In practical terms, students first experiment with the creation of an ear. This is an enigmatic form that defies symbolic representation and demands close attention to detail. After this, they experiment with modeling a face in clay ... blindfolded. This exercise requires students to use their sense of touch to help navigate proportion and spatial relationships. Once the blindfold is removed, students develop the face further. This face is a practice ground for the life-sized head they next build.

Using the coil method, students build hollow clay core forms from which they manipulate the form both inside and out. Once this core is established, shoulders and neck are articulated and the head takes form. At first the head is shaped from the inside, out. Imagining the formative forces at work, students create a “negative” skull so that they might then address the fleshy exterior of the head. As the work becomes more detailed, the heads take on unique personalities. Each student responds to an emerging character and form. While students are encouraged to work from life, they also let their own creative insights and feelings for the form determine the way their sculptures evolve. The
final forms reflect both careful life study and the inspired development of character as it is revealed in the nuances of the human head.

Grade 12 Student Learning Expectations

• Control of clay
• Improved hand eye coordination
• Analysis of 3-dimensional composition
• Continued improvement of self-control, focus and observation
• Recognize and express intuitive, imaginative and perceived forces at work and combine these perceptions with objective form

Assessment

• Teacher observation in class
• Portfolio review
• Written reports

Practical Arts

Handwork & Crafts

Handwork Grades 1-8

The Handwork program at the Emerson Waldorf School helps students develop a wide variety of skills while fostering patience, persistence, confidence, and cooperation. It encourages students to become industrious and practical. This creative use of the hands prepares a solid foundation for the intellect to build upon in the years ahead. A healthy feeling life is supported through working with the imagination and the frequent creative choices linked to the work. An understanding and appreciation of the world is fostered as the students take part in these basic crafts.

Student Learning Expectations

Grade 1

• Create knitting needles by shaping, sanding and oiling wooden dowels
• Perform the basic knit stitch, hold the yarn and needles correctly to produce neat and even stitches
• Knit two to three projects that are basic rectangles
Emerson Waldorf School
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• Ability to cast-on, cast-off, tie-on new yarn color, count rows, pay careful attention to changing patterns
• Maintain focus and concentration while working within a class setting

Grade 2
• Continue to learn or improve the skills from Grade 1: neat even knit stitch, cast-on, cast-off, careful stitch and row count, changing colors, sewing in ends
• Purl stitch
• Remember and successfully execute more complicated pattern changes
• Recognize and be responsible for mistakes
• Improve color discernment by working with the subtle colors of plant dyed yarns

Grade 3
• Exhibit industriousness through crocheting practical items
• Master basic crochet stitches to create increasingly complex projects: a belt, a small square for a pouch and a hat
• Work with neatness and precision
• Create extra projects using more complicated stitches for round mats, square mats, chevron pot holders, granny squares, net bag, etc.
• Finish any uncompleted projects from last year
• Learn wool carding and use of the drop spindle

Grade 4
• Learn cross stitch embroidery and finish one large cross stitch project
• Hand sew a linen handwork bag incorporating pinning, basting back stitch and hemstitch
• Create and embroider the bags design to indicate the function of the bag
• Optional- Felt a ball and embroider it, creating a design that gives an image of what a ball does
• Learn chain stitch embroidery, extra stitches will be taught to those inclined toward more
• Create mirror image designs and translate freely without tracing or patterns on cross stitch fabric
• Thread the needle, beginning and ending knots, work stitches neatly
• Treat supplies with care and respect
• Take responsibility for recognizing and having mistakes corrected
Grade 5
• Properly prepare and skein yarn
• Dye yarn using plant dyes
• Create knitting needles by shaping, sanding and oiling wooden dowels
• Knit with four needles in the round to make a pair of socks
• Knit, purl, cast-on, cast off, garter stitch, stockinette stitch, ribbing
• Following a pattern sequence for heel turning and toe decrease progressions and Kitchner stitch
• Work with neatness, accuracy, and correct tension and recognize mistakes
• Take responsibility for recognizing and having mistakes corrected
• Demonstrate patience and persistence to complete two socks

Grade 6
• Create a three dimensional hand sewn animal from a two dimensional drawing.
• Create the drawing to capture the gesture of an animal
• Conceptualize all the different surfaces of the animal
• Draft the pattern pieces, using circumference and diameter math concepts
• Demonstrate mastery of fabric choice, pattern pinning, accurate cutting
• Baste, back stitch and overcast stitch, working neatly with accuracy
• Stuff to shape and creating inner armature if needed
• Finish with embroidery, felting or other techniques as needed

Grade 7
• Create a 12” soft sculpted doll and its clothing, choosing oneself or a person worthy of admiration, to model the doll’s eyes, hair and skin colors, and to design and sew the costume
• Become proficient in the skills of pinning, back stitching, basting, pattern making and complex sculptural forming
• Listen carefully and follow instructions

Grade 8
• Construct a garment using a sewing machine
• Understand the use of the non-electric treadle sewing machine
• Understand the use of the electric sewing machine
• Understand and accurately use a commercial clothing pattern
Become proficient in accurate pattern layout, pattern adjustment, pinning, cutting, basting, seam construction, ironing, gathering, hemming, top stitching, inner facing, collar and sleeve construction

Assessment for grades 1-8
- Teacher observation in class
- The finished handwork project acts as a clear indication of skills learned and capacities acquired

HS Craft Curriculum

The more we take into account that intellect develops from the movement of the limbs, from dexterity and skills, the better it will be”

- Rudolf Steiner, Basel Course 1920

The Craft Curriculum at EWS is currently in a stage of renewal after lying dormant for some years. Below reflects the courses taught (with some variation) in 2013-14 and those on the schedule for 2014-15.

Grade 9
Printmaking
The 9th Grader is acutely aware of the tensions between polarities and is thus specifically receptive to exploring black and white composition. Since a successful composition relies as much upon what is there as what is not there, the artistic goal is to bring life to these dualities in tandem. Relief printing, with its black and white nature, is perfect for this practice. Students initially study symmetrical and asymmetrical compositional forms in black and white, first with cut paper, then with printing. Once an understanding of composition is established, students begin to create prints in black and white that also deal with how to create areas of value gradation between the polarities.

Student Learning Expectations
- Become familiar with basic compositional language and issues
- Demonstrate skill in basic relief printing techniques
- Demonstrate self-discipline and positive work ethic in the classroom

Assessment
- Observation in class
Puppetry
Students are introduced to the world of puppetry via a variety of puppet modalities (paper mache; rod puppets, shadow puppets). The technical craft of making and performing with puppets is a general aim of this class while also delving into the art of imbuing the puppets with character and personality. This is done through the details of the puppet form itself (facial expressions, posture, costume, etc.) and the puppet as performer. Group work and problem solving are central to what is experienced when creating a show for the puppets' characters to perform.

Student Learning Expectations
• Demonstrate specific skills related to the art and craft of puppet making
• Demonstrate appropriate teamwork and cooperation through puppet performances
• Create puppets and perform while remaining responsible to the group

Assessment
• Observation in class
• Review of puppets and show
• Written reports

Grade 10
Weaving
This block offers the 10th Grader an introduction to basic four-shaft weaving. Students learn to plan a project, wind a warp, dress a loom, and weave a variety of twill patterns. Patience and precision are qualities every new weaver develops. Weaving small mats, or “mug rugs” as they are known in the weaving community, offers the opportunity to personalize the weaving experience through color and structure with attention to creating clean selvedges, maintaining an even beat, and creating a pleasing overall design.

Student Learning Expectations
• Learn basic four-shaft weaving
• Develop patience, precision and persistence
Assessment

• Observation in class
• Review of assignments
• Written reports

Cooking

The primary goal of the cooking class is to experience a variety of different cooking techniques and types of food while also exploring issues fundamental to the question, “What should I eat?” Students develop consciousness and responsibility for some of the practical aspects of cooking from proper planning, budgeting, preparation, execution, enjoyment and cleanup. Each student keeps a notebook of class recipes, processes and pertinent information relative to the course.

Student Learning Expectations

• Practice basics of cooking
• Develop awareness of how what eat affects our bodies
• Understand food and cooking as elements of culture

Assessment

• Observation and participation in class
• Review of cookbook
• Written reports

Bookbinding

This block offers an introduction to four basic bookbinding techniques. Students learn to make a pamphlet, stab binding, accordion and Coptic binding books. The ability to follow specific instructions with careful attention to process and details is critical to creating a book that is both artful and well-crafted. Mastering techniques is of primary importance but artistic enhancement is also encouraged.

Student Learning Expectations

• Learn a variety of bookbinding methods as presented
• Demonstrate basic skills associated with handmade books (measuring, cutting, gluing and paper selection)
Assessment

• Observation in class
• Review of projects
• Written reports

Grade 11 -- No Craft Blocks Currently

Grade 12
Metalsmithing/Forge work
Woodworking

PRACTICAL ARTS Grades 6-12
Goal: to make beautiful and useful objects each year in an age appropriate way.

“A key to the education of adolescents is to provide activities which focus their will energy. ... When their will is directed by tasks they do in the practical arts, they become different people. They become more integrated into life and more fully incarnated onto the earth ... This adolescent time is one where aesthetics and form are needed to create life harmony...It is the task of the teacher to guide the adolescents through their painful introspection, to help them let go of their own stuck intentions, and help them recognize what each medium has to present from within itself. The students have to go through a metamorphosis of their own intentions and allow themselves to work in partnership with the material, be it stone or wood (or metal or other)... The practical arts provide the opportunity for the student to carve, model, and forge – to transform materials through the force of their will and to enliven them with the power of their own spirit... Once the student has been connected to the subject through his feeling for it, and awakened in his thought life, then the knowledge can flow into his will, into his active deeds.

A Chinese proverb states the following:
When I hear -- I forget
When I see -- I remember
When I do -- I understand
Self-observation, self-evaluation, and the capacity to take on responsibility are characteristics of personal growth. Skills learned in the crafts become the development of practical consciousness. This practical consciousness has its genesis in an increased power of observation...”

From *Will-Developed Intelligence*, by David Mitchell and Patricia Livingston

“The hand is the outer brain of the human being” -- Emmanuel Kant

**Grades 6-8**
Beginning in Grade 6, students take Practical Arts classes. In these classes, the students make beautiful, practical objects out of wood and metal. Most of the time, especially in the Lower School, only hand tools are used. This gives the opportunity to concentrate on precision in the use of these tools and on developing endurance and skillfulness of hand. This helps to train the child’s senses as well as the will.

**Grades 9-12**
The High School Practical Arts curriculum includes coppersmithing, woodcarving, joinery and blacksmithing.

**Student Learning Expectations**
- Above all - practice “common sense” in the Woodwork Shop and when metalworking
- Listen closely and follow instructions
- Practice observation - be ‘objective’ about observations - do not pretend that something is correct when it needs attention
- Remain ‘in the moment’ and strive to pay attention to the process of the work
- Ask questions when in doubt or in need of help
- Be patient with the material, the tool and the teacher
- Persevere
- Be flexible
- Be responsive to the material and the tools
- Follow all workshop safety protocols
- Try hard and do the best work within ability
- Learn the nature of different wood types: e.g. soft, hard, grainy, knotty
• Learn the use, care and respect of a wide variety of mainly hand tools

Assessment
• Teacher observation of how the student works in class
• Projects

Middle School Practical Arts Curriculum
Grade 6
Woodwork
The students meet in the woodshop, once per week for 1 1/2 hour periods, throughout the school year. Our first project consists of shaping an egg, the archetypal primal form, from cedar wood harvested from our campus.

The tree is chosen carefully, cut down and sawn into suitable lengths using handsaws. Each student receives a small log and begins shaping it according to the guidelines described below. First the log needs to be split, either with an axe or by using a froe, a specialized tool used for ‘riving’ particularly straight grained timber.

Using drawknives the pieces are carefully cut into square billets. Using rasps the billets are made cylindrical on one end. Once the piece is suitably cylindrical, rasps are used to form the ‘top’. When satisfied with the form of the top, the students begin to rasp into the lower part of cylinder to form the bottom of the egg, using the convex side of the rasp.

More careful rasping ensues followed by the use of the file. The piece is frequently moved in the vise to keep its cross section as round and symmetrical as possible. Gradually the egg shape emerges and finally it is cut off from its narrow stem. Then comes many sessions of sanding until the student has his or her archetypal egg shining in hand! The eggs are finished with a coat of linseed oil.

During the second half of the year the students are busy making swords for their knighting ceremony. These are created using poplar boards that were shaped using similar techniques described above – rasps, files and sandpaper. A few students use a block plane or a spoke shave for smoothing the blade.
The handle is shaped according to the students design. Some cutting out is done with coping saws. The cross guard is drilled in the center using a brace and bit. This hole is made rectangular to accommodate the blade using a coping saw and a square file.

Sanding the finished wood takes a few sessions, after which the pieces are glued in place.

Linseed oil as applied to give the sword a gentle sheen.

At the end of the year ceremony the completed swords hold a place of honor as they are used for the knighting of each student!

**Grade 7**

**Woodwork**

The students meet in the workshop for Woodwork, once per week for 1 1/2 hour periods, throughout the school year. To create a beautiful spoon from a log or a branch requires care and hard work. For this project we use a branch from a locally grown tree, either Bradford Pear, Crepe Myrtle or some similar close-grained hardwood. As in the case of the egg, the log is first split and then shaved down with a drawknife until it is squarish in section. The bowl is carved out first, while the student has a good hold on the stock. Then the handle is roughed in. After that the bowl of the spoon is smoothed using scrapers and sandpaper. Work has to be performed efficiently, especially at the beginning because the wood becomes very difficult to work as it dries out. When the spoon is finished, food safe walnut oil is applied.

For their bowl the students use pine, spruce or some other variety of softwood. The process they use consists of working the inside first, as with the spoon ‘bowl’. Carving gouges are used until the inside has the concave shape needed. Ridges and troughs produced by the gouges are then removed, using a scraper. Smoothing is completed by using finer and finer sandpaper. The surface is sealed by applying walnut oil.

**Grade 8**

**Woodwork**

During this year the students make either a stool or a bench. Various woods are used according to the choice of the student. For the tops either pine, cedar, maple or even oak. For the legs we use pine, cedar, maple or hickory.
Most students start by working on the legs and for this purpose we may fell a small suitable maple tree from the school property. Newly cut, ‘green’ wood is easier to work than seasoned wood. The tree is cut into suitable lengths and then split to provide the pieces for the legs. These billets are then roughly shaped using a froe and an axe. Next a drawknife is used to shave the billet into an approximate square section, before carving it into a cylinder. Final shaping is done using a spoke shave, a rasp and a file.

Each student designs his or her own legs. Two students at a time can use the pole lathe to turn the legs, if they choose. Different methods are required for making legs from pine. This wood was already sawn, and air-dried. Preparation is done using hand planes.

The tops, being cut from sawn lumber, are first sawn to length. Then they are rasped to shape and planed, scraped and sanded to finish. Using a brace and bit, one inch holes are carefully drilled at the correct angle for the legs. The tops of the legs are shaped using a tenoner. This is a specialty tool – a cutter driven by an electric drill that forms a round tenon that fits in the hole. Each tenon is cut down vertically along the grain and a wedge is inserted in the saw kerf. Glue is applied and the tenon is driven home. Final sanding is done and then tung oil with citrus solvent is applied to give a beautiful sheen finish!

High School Practical Arts Curriculum
Under the auspices of the Practical Arts Curriculum there are currently three disciplines practiced in the High School:
Woodwork: Grades 9-12
Coppersmithing: Grade 9
Blacksmithing: Grade 12

Woodwork
In the four years of High School we continue to build on the woodworking skills that have been developed in the earlier grades. Working with wood gives the students, the opportunity to experience life lessons in a direct, yet also forgiving, manner. This practical world gives the students immediate feedback. It guides them to truly observe what they are doing, to always “pay attention” to the activity at hand. By the careful use of specific tools they are given the opportunity of creating a variety of both useful and beautiful items. Their ‘hands on’ interaction with the woodworking
tools and the material is what produces the result. What they are thinking, feeling and doing directly affects the material that they are working with. When they pay close attention they can see the immediate results of their actions! Working with wood encourages them to develop, amongst other attributes: observation skills, eye-hand coordination, aesthetic judgment, patience, perseverance, creativity and to be careful!

There are two main themes in the High School Woodwork curriculum:
A. Woodcarving: for example carving a name sign.
B. Joinery: for example making a dovetail box in 11th grade.
Each student will have the opportunity to develop skills in both of these directions.
Other areas of work may include: green woodwork, pole lathe work, carpentry, set construction and toy making.
Specific projects chosen for a particular group, or in some cases if necessary, for a particular individual, will depend on the needs of that group or individual. The aim is for each individual who attends the High School for four years to have a graduated and substantial woodwork experience.

During the year, each Grade will have two eight or nine week blocks of Practical Arts. Each block will consist of up to eighteen 90 minute periods (depending on interruptions in the calendar).

**Grade 9**
**Woodwork**
In the fall the Grade 9 students first complete any unfinished stools that were begun in Grade 8. When the stools are complete the class will begin a Coppersmithing block. In the spring, the students carve a name sign. A piece of two inch thick basswood is prepared by being cut to size and planed flat and square all round. The students select a suitable font. Their chosen name, printed off and enlarged to the required size, is transferred onto the surface of the board using carbon paper. Carefully the waste material is removed with carving gouges and the letters emerge. Patience is especially important as the gouge nears the outline of the letter. This is a slow process and the students will be working on this project for most of 10th Grade as well as 9th Grade.

**Grade 10**
**Woodwork**
Most of 10th Grade students spend the year working to complete their name signs. Those who finish theirs in time can choose a project. They can choose to carve a motif or a clock face, or they can make a small joinery item.

**Grade 11**

**Woodwork**

This year the students will further refine their skills at fine woodworking when they take on the project of creating a dovetail box. The planks will be cut to length and planed square on all faces in preparation for the delicate task of marking and cutting dovetail joints. The box will have an inset base and a hinged lid.

This finer woodwork will include the use of most of the following tools: straight rule, square, marking knife, marking gauge, jack plane, smoothing plane, low angle and block plane, miter box with short box saw, Japanese dozuki saw, shooting block, bench hook, dovetail template and dovetail saw, and various chisels.

**Grade 12**

**Woodwork**

On completion of the dovetail box the 12th Graders can choose a project. This could be a piece of furniture, carving a sculptural piece or a musical instrument.

**Student Learning Expectations**

**Grade 6**

- Introduce and develop safe, careful and efficient methods of working in the Woodwork Shop.
- Introduce and familiarize the use of a wide variety of woodworking tools, including
  - two person saw
  - sawbuck
  - froe
  - splitting wedge
  - drawknife
  - rasps and files
- Develop ability to solve problems associated with creating a beautiful egg and a sword. These are problems that are both practical and aesthetic in nature.

**Grade 7**
• Continue to develop safe, careful and efficient methods of working in the Woodwork Shop.
• Increase skill level with a wide variety of woodworking tools
  o various carving gouges
  o chisels
  o rasps and files
  o spoke shave
  o draw knife
  o coping saw
  o panel saw
  o back saw
  o smoothing plane
• Increase ability to solve problems associated with creating a beautiful and useful household object. These problems are both practical and aesthetic in nature.

Grade 8
• Continue to increase skill level with a wide variety of woodworking tools
  o froe
  o mallet
  o wedge and sledge hammer
  o hatchet (preferably flat one side)
  o draw knife and shave horse
  o rasps and files
  o spoke shave
  o rip saw
  o panel saw
  o back saw
  o coping saw
  o smoothing plane and jack plane.
• Continue to increase ability to solve problems associated with creating a beautiful and useful household object. These problems are both practical and aesthetic in nature.

Metalworking
Coppersmithing - Grade 9
Coppersmithing is a course that introduces Grade 9 students to the processes of shaping and forming copper into artistic forms. While the process of forming a hand-hammered copper bowl requires students to develop gross and fine motor skills, it is also important for them to have the soul experience of repeatedly annealing the metal to allow softening and further working as well as rhythmic and repetitive hammering required. Focus and control are required in order to create a beautiful symmetrical form. Students are encouraged to bring their copper to a brilliant shine as a complement to their well-earned perfect forms.

**Student Learning Expectations**

- Demonstrate basic coppersmithing skills (cutting, hammering, annealing)
- Demonstrate focus and control in the work
- Develop will oriented work that, with care, becomes an artistic exercise

**Assessment**

- Observation in class
- Review of Assignments
- Written Reports

**Blacksmithing- Grade 12**

One of the beauties of Waldorf Education is the integration of handwork at age appropriate levels, beginning with finger knitting and molding beeswax in Early Childhood programs. The child/student progresses through more complex materials and methods through the grades including knitting, sewing, molding clay, shaping wood, copper smithing, all using natural materials of the earth. Blacksmithing is a culmination of these practical arts and also brings in the classroom learning of physics, math, chemistry, history, art. Fire draws the eye, mind and heart. Little used muscles strengthen with each hammer blow. The hot metal moves and forms like the beeswax of earlier years and hardens again as it cools. There are times to be gentle and times to be strong. Blacksmithing pulls one inward to the elements of nature and outward to the craft creation of beautiful art and useful tools.

At EWS, blacksmithing is currently taught only in the senior year, however, planning is in progress to begin in the junior year.
Before a student takes up a hammer there are basic discussions of safety in the smithy, metallurgy, and the principles of moving metal. Analogies are made to skills learned before and the laws of physics. Seniors begin with making a coat hook from a half inch square by ten inch piece of mild steel. All the basic skills of the blacksmith are used in making the coat hook: pointing, drawing out, upsetting, grooving/veining, rounding, squaring, straightening, twisting, bending, punching, drifting and more. During the making of the coat hook students learn an appreciation for proper sequence of fabrication. Second and ongoing projects are student choice and may range from a decorative bottle opener, fireplace implements, a sculptural art piece or the student may turn to blade smithing a knife. Future second year blacksmithing students will have a required project of a forged flower and then will move on to a student choice project. We are very pleased to now have an operational "smithy" located just below the woodshop on campus with two stationary forges, one portable "farm forge” and six anvils.
Performance Arts

Eurythmy

Eurythmy is a form of movement that makes language and music visible. The children experience this through expressive gestures and group forms that they move in space. Eurythmy works in the realm of artistic movement so that the children’s wills are strengthened and their thought lives are brought fully into their limbs. To this end, a sense for upright human motion, the living realm of sound, the formative powers of gestures and human spatial relationships are brought to the children, both individually and socially through the art of pedagogical speech and tone eurythmy.

The structure of the lesson and the elements brought to the children progresses developmentally through the grades. The eurythmy lesson works in conjunction with the morning lesson curriculum so as to support the developing life of the child and class. Academic skills are supported and strengthened through movement. The children develop spatial perception, both individually and as part of the whole. The students develop social interaction and cooperation through movement as a coordinated group. Concentration, dexterity, coordination and listening skills are developed through rhythmic exercise, poetry and music.

The children progressively develop a sense for the formative and expressive natures of tone, musical intervals, melody and pitch through gesture and movement. The children progressively develop and increase awareness of, and appreciation for, speech, articulation and language through poetry, stories and dramatic moods through gesture and movement.

Throughout the eight years, the children master the vocabulary of eurythmic gestures. They also perform artistic speech and tone eurythmy and develop choreographic skills. These are general objectives of eurythmy overall.

Grade 1

Curricular Goals: Through imitation, repetition and rhythmic movement, using verses, poems and fairy tales, the students will:

• Experience eurythmy gestures for the sounds of speech.
• Move on straight and curved lines
• Reinforce phonetic and writing (alphabet) skills
• Experience simple geometric forms through movement; e.g. spiral forms, circle, square, triangle.
• Strengthen gross motor skills such as skipping, hopping, side-sliding, jumping, running
• Develop skills with simple rhythmic concentration exercises with stepping and clapping
• Experience gestures for pitch and the interval of the fifth in gesture and movement.
• Experience simple coordination exercises such as: stepping over rods placed on the floor in formation

**Grade 1 Student Learning Objectives:**
• Participate actively and with interest
• Move as part of the whole and in two groups, in a limited way
• Show dexterity in gross motor skills
• Grasp simple geometric forms through movement
• Imitate gestures for pitch and interval of 5th tones and sounds of speech
• In a limited way, to be able to move alone, such as walking a straight line or in and out of a spiral with an imaginative picture as a guide.
• Develop an appreciation for fairy tales from all cultures.
• Ability to stand straight and tall with both feet on the ground and with arms at rest
• In group movement be able to maintain space in front and in back
• Move harmoniously with classmates
• Enjoyment of sounds of speech and of music in eurythmy gesture

**Grade 1 Assessment**
• Teacher observation of in-class participation and effort

**Grade 2**
Curricular Goals: Students will review and further develop all areas from Grade 1. The following will be added:
• Longer verses and poems
• Use of fables and legends
• Simple pentatonic melodies with pitch gestures
• Moving simple mirror image forms in space as a group and in pairs
• Further development of spatial relationships in moving through geometric forms
• Experiencing more complex concentration and dexterity exercises, such as jumping vowels AEIOU
Grade 2 Student Learning Objectives

- Participate actively and with interest
- Move as part of the whole, in two groups and individually, in a limited way
- Mastery of these gross motor skills: skipping, side-sliding, hopping, jumping
- Move correctly with whole group (teacher led) in circle, spiral, figure eight and eurythmic forms: curve of Cassini, harmonious eight
- Move correctly in a small group - in a square, in a triangle
- Imitate correctly the gestures for speech and music that have been presented
- Move correctly in simple mirror image forms
- Demonstrate growing rhythmic accuracy in stepping and clapping
- Develop appreciation for fables and legends and experience the underlying moral lesson
- By the end of the year, have a beginning conscious awareness of what sound is for which gesture.
- Remember movement sequences from class
- Move harmoniously with classmates

Grade 2 Assessment

- Teacher observation of in-class participation and effort

Grade 3

Curricular Goals: Review and further develop all previous work with the addition of:

- Conscious learning of the sound gestures
- Use of Hebrew Bible stories, farming and house building stories and verses.
- Conscious group movement with more complex geometric forms such as: variations on square, pentagram, crown form, figure eight, spiral (group and individual), and eurythmic forms: curve of Cassini, harmonious eight
- Individual and group contraction and expansion exercises
- Coordination, dexterity and simple clapping exercises
- Rhythmic walking, clapping to music and verses
- Recognition of pitch in a simple melody and identifying musical phrases through movement and/or clapping
- Introduction of gestures for C-major scale
- Introduction to major and minor through listening to melody and through simple gesture
• Concentration exercises with counting
• Use of copper rods in simple dexterity, rhythmic, pitch exercises

**Grade 3 Student Learning Objectives**
• Participate actively and with interest
• Move harmoniously as part of the whole, in various size groups, and individually
• Beginning knowledge of the gestures for the sounds of speech and for the tones of the C major scale
• Competence in moving through the group geometric forms
• Developing accuracy in rhythmic walking and clapping
• Developing accuracy in coordination and dexterity exercises
• Accuracy in concentration exercises
• Beginning to experience the task and responsibility of the individual as part of the greater whole, as illustrated in Hebrew Bible stories and farming stories and verses.
• Can expand and contract the circle in a group, maintaining equally balanced spaces in front, behind and from side to side

**Grade 3 Assessment**
• Teacher observation of in-class participation and effort
• Teacher observation of performance

**Grade 4**
Curricular Goals: Review and deepening of skills will continue. Poetic forms and gestures become more complex, and students will begin to creatively apply their knowledge of gesture and form to poems and verses. The story is no longer the total form as basis of the lesson. Material continues to be introduced in an imaginative way.

In tone eurythmy, there is further work with major and minor. Appropriate exercises support morning lesson grammar work. New work includes:

• Concentration exercises with clapping and stepping, e.g. in 4 and 8 beat patterns
• Continuation of movement and practice in the more complex geometric forms, with the addition of: weaving figure eight, weaving forms, more complex spiral forms
• Continued practice of dexterity exercises involving use of copper rods
• Work with alliteration, poems and/or stories from Norse mythology, Native American lore and questions and answers in poetry and/or music
• Work with gestures for the C-major scale, identifying and demonstrating tones of a simple melody in C.
• Work with canons in gesture and movement, in 2, 3, or 4 parts
• Introduce movement in simple rounds in two parts, with different exercises
• Listening for and identifying major and minor thirds
• Gestures and forms for major and minor thirds
• Experience ¾ and 4/4 time through movement
• Bass and treble melodies are introduced through listening, movement and clapping
• Recognizing and moving to regular and changing rhythm, pitch and musical phrases
• Introduce various movements inherent in the parts of speech
• Work with a notebook of geometric forms and poems used in class
• Teach Maypole dances if not done in another class
• Introduce movement in geometric forms with a frontal orientation

**Grade 4 Student Learning Objectives**

• Active and attentive participation
• Accuracy in concentration and dexterity exercises with stepping and clapping
• Accuracy in moving geometric forms thus learned
• Developing accuracy in copper rod exercises that have been taught
• Be able to hear and identify difference in major and minor in gesture and movement
• Be able to correctly walk ¾ and 4/4 time to music with the group.
• Practice accuracy in moving to regular and changing rhythm and beat
• Maintain a completed notebook of geometric forms
• Learn and perform Maypole dances in this or another class
• Ability to move geometric forms in a frontal orientation, which gives students and experience of independence in movement
• Experience the richness of mythology and different cultures through the stories, verses, poetry, and music
• Be able to demonstrate tones of C major scale with the group.
• Be able to figure out tones of a simple melody and demonstrate them in gesture
• Be able to accurately move in simple 2, 3, or 4 part rounds (canons)
Grade 4 Assessment

- Teacher observation of in-class participation and effort
- Teacher observation of performance

Grade 5

Curricular Goals: All students will review and deepen skills taught thus far. Poetic gestures and forms become more complex as students continue to creatively apply their knowledge of gesture and form to poems and verses.

Tone work continues with musical phrases, tones, melody and beat.

New work includes:

- More complex and complicated concentration, dexterity and copper rod exercises, to be introduced and practiced
- More complex and challenging group movement on geometric forms to be worked with
- Poems and verses from India, Persia, Egypt, and Greece, among other ancient cultures, will complement the morning lesson curriculum
- Review of C major scale and introduction of gestures for other major scales, e.g. F, G, B-flat
- Experience musical phrases and motif, pauses, rhythm, beat, and melody in pieces through movement and gesture
- Introduction to Greek rhythms – iambic, trochaic, dactylic, anapestic, and spondaic
- Exploration of and work with changing rhythms and tempo in music
- Work with copper rod exercises for accuracy in: 7-part, 12-part and twirling
- Possible homework: draw geometric forms that have been experienced through movement
- Continued work with movement in a frontal orientation, in varied exercises
- May introduce simple triangle transitions in geometric space

Grade 5 Student Learning Objectives

- All age appropriate objectives from Grade 4
- Participate actively and attentively
- Show increased accuracy in moving through geometric forms in the group and independently
- Demonstrate accuracy in concentration and dexterity exercises
- Experience the ancient civilizations through the medium of verse, poetry, and music
• Know how to demonstrate the gestures for C major tones, independently
• Demonstrate familiarity with different Greek rhythms
• Achieve accuracy in moving the regular and changing rhythm and beat
• Accuracy in foot positions and dramatic gestures
• Appreciation for humor, as expressed in gesture and movement
• Accuracy in copper rod exercises thus taught
• Maintain accurate and complete homework assignments
• Growing confidence and accuracy in moving in a frontal orientation.
• Ability to move to a goal in space and stop effortlessly without losing balance

Grade 5 Assessment
• Teacher observation of in-class participation and effort
• Teacher observation of performance
• Drawings of forms moved in class

Grade 6
Curricular goals: complexity and artistry of form and gesture continue to be deepened. All previous speech, tone, dexterity, rod and concentration work grows more challenging. New work includes:
• Teaching the rotation and transformation of geometric forms, which is supportive of the morning lesson geometry curriculum.
• Introduce the circle of fifths in music (all sharp and flat scales) through gesture and movement in space
• Introduce the identification of the interval of the octave through listening
• Teach the gesture for the octave interval and use it in musical piece(s)
• Work further with musical motifs
• Work as a group with tone and form in musical pieces
• Develop simple form and gesture choreography in musical and poetic pieces
• Introduce personal pronouns through gesture and movement
• Practice accuracy in concentration and dexterity exercises that increase in tempo
• Introduce and practice rod throwing and catching to a partner
• Practice for mastery of more complex geometric forms that are moved in space, such as: symmetric forms, metamorphosed figure eight, five and six-pointed stars
• Teach transitions of triangles, diamonds, and hexagons through movement in geometric formation
• Assigned homework may include: drawing geometric forms that have been moved with the group in class; writing out a major scale
• Practicing consciously the evenly balanced 3-part walking
• Introduce and experience changing spatial orientation in movement of geometric forms
• Introduce foot positions for yes and no and some dramatic gestures

**Grade 6 Student Learning Objectives**
• All age appropriate objectives from Grade 5
• Participate actively, attentively, and respectfully
• Demonstrate accuracy in moving geometric rotations and transformations
• Know the difference between rhythm, beat and pitch through movement and gesture
• Achieve successful group choreography in movement and gesture that is in harmony with music and poetry pieces
• Deepen understanding of personal pronouns through gesture and movement
• Achieve accuracy in throwing and catching copper rods, in established geometric forms and varying rhythms
• Demonstrate correct form in throwing copper rods
• Progression toward mastery of moving through complex geometric forms
• Maintain accurate, timely, and complete homework assignments
• Ability to perform 3-part walking in an evenly balanced manner
• Ability to move geometric forms in varying spatial orientations
• Accuracy in performing concentration and dexterity exercises that increase in tempo
• Balance copper rod on head and move forward, backward and sideways while maintaining upright posture

**Grade 6 Assessment**
• Teacher observation of in-class participation and effort
• Teacher observation of performance
• Drawings of forms moved in class

**Grade 7**
Curricular Goals: all previous work continues to be reviewed and deepened. The students practice for mastery in concentration, dexterity and rod exercises. New work includes:

- Teaching and practicing intricate and more complex transformations, inversions and rotations of geometric forms
- Experience the intervals of music through listening
- Introduce the gesture for each musical interval (2\textsuperscript{nd}, 3\textsuperscript{rd}, 4\textsuperscript{th}, 5\textsuperscript{th}, etc.)
- Introduce counter rhythms and syncopation in musical and rhythmic exercises
- Deepen work with speech and tone choreography, using humorous as well as serious pieces
- Have students choreograph routines with various copper rod exercises
- Introduce and practice small waterfall copper rod exercise and throwing across a square all together
- May introduce copper rod exercises of: rod swing, fire form, throwing on a pentagram
- Work with some major and relative minor scales
- May introduce and work with four elements in movement, form gesture, poetry, music and color, which complements the physics curriculum
- Homework assignments may include: drawing of geometric forms that have been done in movement; writing out major and/or minor scales.
- Introduce humorous expression in gesture and movement

**Grade 7 Student Learning Objectives**

- All age appropriate objectives from Grade 6
- Participate actively, respectfully, and attentively
- Participate as part of the whole and independently
- Learn to identify several musical intervals correctly through listening and with the corresponding gesture
- Ability to correctly step simple syncopation and counter rhythms in a group
- Ability to do more complex choreography with music and poetry
- Achieve mastery of all copper rod exercises thus learned
- Growing accuracy in small waterfall exercise and throwing on a square
- May be able to successfully perform gestures for a major and/or minor scale, alone
- May be able to successfully perform gestures for a verse or part of a verse, alone
- If 4 elements have been introduced, then deepen the experience of the 4 elements through the differing mediums experienced
• Maintain accurate, complete, and timely homework assignments
• Knowledge of and accuracy in demonstrating sound and tone gestures thus learned
• Growing mastery in concentration and dexterity exercises
• Competence in all rhythmic exercises

Grade 7 Assessment
• Teacher observation of in-class participation and effort
• Teacher observation of performance
• Drawings of forms moved in class

Grade 8
Curricular goals: All previous work continues to be reviewed and deepened. Artistic performance standards can be emphasized. New work includes:
• Using ballads, dramatic verse, humoresques and short folk or fairy tales for speech work
• Support morning lesson work with lyric, epic and dramatic verse
• Teach more of the dramatic gestures and foot positions
• Work with complex group forms for musical pieces
• Work with the interval and tone gestures in different musical pieces
• May introduce the spatial movements which correspond to musical intervals
• Introduce the gesture and spatial movement for major and minor chords
• Introductory work with musical dissonance through identification and movement in space
• Emphasize mastery of the sound and tone gestures and of group movement
• Introduce new copper rod exercises: rod swing, fire form, throwing on a pentagram, if not already taught.
• Teach copper rod exercise of the large waterfall
• May teach throwing and twirling of two copper rods at one time
• Introduce and work with 4 elements in movement, form, gesture, poetry, music and color, if not already taught
• Homework assignments may include: drawing of geometric forms that have been done in movement; writing out major and/or minor scales.

Grade 8 Student Learning Objectives
• All age appropriate objectives from Grade 7
• Participate actively, respectfully, and attentively
• Participate as part of the whole and independently
• Deepen appreciation for ballads, folk and fairy tales, lyric, epic and dramatic verse through movement and gesture
• Enrich creative expression through the avenues of meaningful gesture and movement
• Mastery in performance of concentration and dexterity exercises thus learned
• Working toward mastery in knowledge of and fluid and harmonious performance of speech and tone gestures
• Successful learning and performing of poetry, music and story through gestures and movements thus learned
• Continued growing mastery in choreography with and accurate performance of all copper rod exercises thus learned
• Fluid, accurate, and conscious performance of the 3-part stepping
• Mastery of rhythmic exercises thus learned
• Deepen the experience of the 4 elements through the differing mediums experienced
• Maintain accurate, complete, and timely homework assignments

**Grade 8 Assessment**
• Teacher observation of in-class participation and effort
• Teacher observation of performance
• Drawings of forms moved in class

**Dramatic Arts**

**Program Description**
Drama is an integral part of the Waldorf student’s education through the grades. In grades one through seven, drama is more seamlessly integrated into the main lesson block schedule. In the lower grades the plays will arise out of the content of the main lesson, and there is much group recitation as well as musical accompaniment which involves the students. The work is carried by the class teacher, who may call on another colleague or parent for some support, often in the realm of costuming or music. The class teacher may produce a play already published, or they may write their own play for the class.
In the upper middle grades, the drama production becomes more of a ‘project’. The Grades School drama program culminates in the eighth grade, with the class giving a series of performances following a three to four week period of intense rehearsals. Much of the main lesson and art block time is spent preparing for this full-scale production.

In the High School, drama is included as one of the Main Lesson blocks in tenth and twelfth grade, but the emphasis and aim differs from grade to grade. From grades nine through twelve the drama teachers carry the work, and there is a selection process which the drama teacher undertakes independently. In the tenth grade there is a full-scale production and in the twelfth grade an entire art block, as well as a main lesson, is relegated to what is a tour-de-force, multiple performance event.

Learning Goals:
• develop clear speaking practices (enunciation, pronunciation, projection)
• develop capacities for expressing emotions and thoughts through speech and movement
• gain awareness of self in relation to the group
• gain appreciation for thoughts and feeling of others through character development
• develop working memory
• practice the archetypal human gestures (sadness, joy, anger, doubt)

Grade 1
Drama is incorporated into Main Lesson and Subject lessons. A dramatic performance may be given at an assembly or in a stand alone event. Performance is given in a choral recitation form.

Grade 2
Drama continues to be worked with in the course of the lessons. Some thought may be given to drama in the festival life of the school. Performed drama remains in choral recitation form.

Grade 3
Drama is still derived from curriculum and shared at the discretion of the class or subject teacher. Some attention to individual or small group speaking roles may be given. Performed drama remains in choral recitation form.

Grade 4
Drama develops out of the Main Lesson and Subject classes with a new interplay between group and individual speech and gesture. Teacher may assign individual lines for students to learn as well as tasking the whole class with learning a ‘chorus’ part.

**Grade 5**
The tension between group and individual speech and gesture is further accentuated with an attention to balance between the role of the student in relation to the whole class.

**Grade 6**
Drama becomes increasingly geared towards developing the individual capacities and skills of the students by assigning particular roles and working with the social and learning dynamics of the class through the act of putting on a play.

**Grade 7**
Following on from Grade 6, students have more individual responsibility within dramatic work. They should also begin to take up tasks such as set construction, costume making, lighting and programming.

**Grade 8**
The Eighth Grade play is a culmination of the grades dramatic experience. Students should be expected to contribute with individual effort to both the onstage and offstage aspects of a dramatic performance.

**High School**
Patrick Stolfo names the dramatic arts as the capstone of the artistic experience overshadowed only by the social arts. Dramatic arts requires students to work collaboratively and individually through speech, movement and set creation. Students study Tragedy and Comedy in the 9th grade and Shakespeare in the 11th grade, but only in the 10th and 12th grades do the students get a chance to put on a full production for the school.

In the 10th grade, students engage in every aspect of “play” is put together. While the teacher still chooses and casts the play, the students must take on both actor and stage crew roles from building the set to costuming to gathering props.
In 12th grade, the students ultimately own their senior play. They choose the play, assist with casting and participate with all aspects of the production. For students who are just beginning to find their individual “I”s, working as a united team can be especially challenging and rewarding.

Music
Vocal and General Music

Program Description
Implicit instruction. Vocal music is used throughout the Waldorf curriculum. In Early Childhood and the primary Grades, vocal music is used by teachers to help organize the day: songs indicate the beginning and end of the school day, when it is time to transition to specific activities, the beginning of lunch time, shoe changing time, cleanup time, and so on. Throughout the Grades songs also help students learn and retain facts such as multiplication tables, states and capitals, vocabulary in a foreign language, or the anatomy of the skeleton. Teachers use songs to help students experience the turning of the year more profoundly by singing seasonal or festival songs. Songs that serve a purpose in the Grades are taught quite simply through repetition. A teacher intentionally sings the same song in the same way over many days and in time the children naturally join in. Overall, it is typical for singing to be ongoing in a Waldorf Grade School classroom throughout the school day.

Explicit instruction. Vocal music is also approached as its own subject in the Grades music classes and in chorus classes in the Middle and High Schools. In these cases the work is much more direct and conscious than the simple learning through repetition that usually takes place in the classrooms, because ensemble singing is an increasingly important aspect of the curriculum. This instruction emphasizes good, healthy vocal production, careful attention to ensemble and listening, and accurate sight singing. This is built up gradually from Grades 1-3, when tone, pitch, and general musicianship are emphasized. During Grades 3-5, general ensemble skills are introduced along with part singing and sight reading. In Grades 6-12 the emphasis is on four-part singing, emphasizing choral tone, blend, and ensemble sensitivity.

Choral music has a central place in our curriculum because it develops social awareness and sensitivity subtly and implicitly. It encourages the students to be cooperative and collaborative toward an aesthetic end, and builds confidence through regular performances. Finally, choral music allows our students to be more culturally literate, as the choral repertoire we study spans...
masterworks of Western music through the ages, as well as traditional vocal music from many cultural backgrounds.

Student Learning Expectations

Grade 1
• Vocally match pitch
• Sing in a well-supported head voice and with good vocal production
• Identify in-tune or out-of-tune pitches
• Indicate direction and shape of melodic contours
• Respond to form in music through basic dances

Grade 2
• Vocally match pitch
• Sing in a well-supported head voice and with good vocal production
• Identify in-tune or out-of-tune pitches
• Indicate tonal direction and shape of melodic contours
• Sight sing simple notated melodies with a range of over an octave
• Read and count basic rhythmic notation
• Notate basic pitch and melodic dictations using iconic notation
• Respond to form in music through basic dances

Grade 3
• Explore tonal music and the major scale
• Sing in tune in a well-produced head voice
• Understand the major scale and its intervallic relationships: by letter names (C, D, E, etc.); by numbered intervals (2nd, 3rd, 5th, octave, etc.); and in Solfege (do, re, mi, etc.)
• Notate familiar melodies
• Begin standard music literacy study: learn about the staff, clefs, quarter notes, eighth notes, rests, etc.
• Read rhythms in 4/4 and 3/4 including whole, half, quarter, and eighth notes and rests

Grade 4
• Sight sing melodies
• Play notated melodies on the recorder
• Understand the major scale and its intervallic relationships: by letter names (C, D, E, etc.); by numbered intervals (2nd, 3rd, 5th, octave, etc.); and in Solfege (do, re, mi, etc.)
• Notate simple melodies from ear
• Know the major scales and keys up to four sharps and four flats
• Play the recorder one-and-a-half octaves and know the notes f#, c#
• Sing in tune in a well-produced head voice
• Sing basic choral music in two parts
• Identify by ear the difference between major and minor chords
• Improvise basic harmonies
• Sing a variety of traditional, standard folk tunes
• Play individual note melodies on the pentatonic lyre
• Develop basic chord progressions on the bordun lyre
• Read rhythms in 4/4 and 3/4 including whole, half quarter, eighth, sixteenth notes/rests and dotted note rhythms for each; also including eighth note triplets
• Know basic score mapping (repeats, 1st and 2nd endings, etc.)
• Know basic expressive terminology (forte, piano, ritardando, etc.)

Grade 5
• Sight read vocal music in two parts without accompaniment
• Practice music literacy knowledge: rhythm and melody reading, score reading
• Follow a conductor and refine the expressive elements in music in order to make performances artistic and interesting
• Refine vocal technique such as vowel and consonant production

Assessment: Grades 1-5
• Informal performance evaluation
• Portfolios

Grade 6
• Continue to refine learning goals from Grade 5, possibly adding three-part and SAB mixed repertoire as the developing voices allow

Grade 7
• Sight read vocal music in three or four parts without accompaniment
• Practice music literacy knowledge: rhythm and melody reading, score reading
• Follow a conductor and refine the expressive elements in music in order to make performances artistic and interesting
• Refine vocal technique such as vowel and consonant production

**Grade 8**
• Continue to refine learning goals from Grade 7

**Grades 9-12**
•

**Assessment: Grades 6-12**
• Informal performance evaluation

**Instrumental Music**

*Program Description*
Instrumental music instruction is an important part of the curriculum for all students at the Emerson Waldorf School. Learning an instrument requires focus, discipline, and perseverance; we nurture these qualities in our students. Instruction begins in Grade 1 with the teaching of simple instruments such as the wooden, pentatonic flute and the seven-string, pentatonic lyre. In Grade 4 the students take up an orchestral string instrument, and in Grade 6 some of them will switch to orchestral woodwind, brass, or percussion instruments. Through careful, incremental instruction and continual expectations of growth and improvement, the teachers are able to draw out and develop the students' self-discipline through the work of ongoing instrumental music practice and rehearsal.

**Student Learning Expectations**

**Grade 1**
• Support all general music learning goals of the vocal music curriculum
• Play flute and lyre with the technique and aptitude necessary to play simple melodies by ear
• Create simple accompaniments and arrangements for songs learned by rote

**Grade 2**
• Support all general music learning goals of the vocal music curriculum
Play flute and lyre with the technique and aptitude necessary to perform simple melodies by ear and produce an even, pleasing tone
Create simple accompaniments and arrangements for songs

Grade 3
- Support all general music learning goals of the vocal music curriculum
- Begin playing diatonic flutes
- Play the flute one and a third octaves
- Sight sing melodies and play notated melodies on the flute by sight
- Sing and play flutes with care and attention toward tone and beauty
- Learn about the orchestra

Grade 4
- Demonstrate good playing posture
- Name the different parts of the instrument
- Play left and right hand pizzicato
- Demonstrate correct bow hold and bowing arm technique
- Read music notation
- Utilize listening skills through rote learning and aural discernment
- Play with good tone and intonation
- Read and play in the key signatures of D, G, C major
- Read rhythms in 2/4, 3/4, and 4/4 time signatures, including whole, half, quarter, eighth notes and rests
- Perform legato and staccato bow articulations; slurred and hooked bowings
- Read basic score mapping (repeats, 1st and 2nd endings, etc.)
- Read basic expressive terminology (forte, piano, ritardando, etc.)
- Play ensemble pieces of at least 2 parts
- Improvise using basic scale patterns
- Establish good practicing habits and routines
- Practice respectful classroom and rehearsal conduct

Grade 5
- Review and continue development of basic concepts from Grade 4
• Improve note reading and sight-reading abilities
• Bow with varying bow speeds, contact point, and arm weight
• Read and play in the key signatures of F, A, B-flat, and E-flat major; G, D, A minor
• Read rhythms in 6/8, 2/2 time signatures
• Read dotted note values, sixteenth notes, syncopation, triplets
• Perform more advanced fingerings patterns (e.g. extended and lowered fingerings)
• Perform beginning shifting exercises
• Read basic score mapping (repeats, 1st and 2nd endings, etc.)
• Read basic expressive terminology (forte, piano, ritardando, etc.)
• Play 3-part ensemble pieces
• Build on good practicing habits and routines
• Improvise using basic scale patterns
• Practice respectful classroom and rehearsal conduct

Assessment: Grades 1-5
• Informal performance evaluation
• Portfolios

Grade 6
• Support and continue to develop all music literacy skills from the younger Grades, especially music reading skills
• Learn proper rehearsal/practice etiquette (including preparation and behavior)
• Develop discriminatory listening skills
• Learn to play expressively not only by following all of the composer’s written instructions, but also by collaborating with the rest of the ensemble to express the composer’s artistic meaning
• Demonstrate active listening skills (attention to ensemble blend and balance)
• Improvise using basic scale patterns
• Continue good practicing habits and routines
• Practice respectful classroom and rehearsal conduct
• Play in a School ensemble
  0 Orchestra
• Learn and play ensemble music up to Grade 3 in difficulty
• Read and perform with shifting
• Begin vibrato exercises
• Play with good tone and intonation
• Perform with greater control over dynamics
• Read and play major scales up to 5 sharps and flats; natural minor scale
• Perform in a four-part ensemble
• Sight read up to Grade 1 ½ music
  0 Band
• Learn proper posture, breathing, hand position and embouchure while playing
• Learn notes and fingerings for at least a 2 octave range
• Play from memory the concert B-flat, F, and E-flat scales
• Sight read Grade 1 music
• Learn and play ensemble music up to Grade 2 in difficulty

Grade 7
• Continue to develop and strengthen all instrumental music learning goals from Grade 6
• Play in a School ensemble
  0 Orchestra
• Learn and play ensemble music up to Grade 3 in difficulty
• Read and perform with shifting
• Begin vibrato exercises
• Play with good tone and intonation
• Perform with greater control over dynamics
• Read and play major scales up to 5 sharps and flats; natural minor scale
• Perform in a four-part ensemble
• Sight read up to Grade 1 ½ music
  0 Band
• Play from memory the concert B-flat, F, E-flat, A-flat, D-flat, G, and D scales
• Sight read up to Grade 1 ½ music
• Learn and play ensemble music up to Grade 2 ½ in difficulty
• Play with excellent tone and intonation
• Play with fine control over dynamics

Grades 8-12
• Continue to develop and strengthen all instrumental music learning goals from Grade 7

• Play in a School ensemble
  • Orchestra

• Learn and play ensemble music of up to Grade 5 in difficulty

• Perform with greater control over dynamics and tone quality (bow speed, contact point, arm weight)

• Sight read up to Grade 2 music

• Play major and minor scales up to 7 sharps and flats; chromatic scale

• Perform in an ensemble of 5+ parts
  • Band

• Play from memory the concert B-flat, F, E-flat, A-flat, D-flat, G, D, A and E scales

• Sight read up to Grade 2 music

• Learn and play ensemble music up to Grade 5

**Assessment: Grades 6-12**

• Informal performance evaluation

• Formal performance evaluations

**Physical Education**

**Grade 3**

Prior to Grade 3 movement has been integrated into the activities of the Main Lesson and other subjects. Third Graders are preparing for the nine-year change in which they will awaken to the world outside of the self. This parallels their awakening to their physical abilities. Thus, Grade 3 is an excellent time to begin formal Physical Education in which the activities help the children to step out from the group to test their skills, while still maintaining the comfort of belonging to a group.

Descriptions of games are given in images so as not to awaken the intellect. The boundaries of the games are close in and are well delineated. As the year progresses the games allow for voluntary individual expansion to go out into the world as the boundaries expand, and then for the comfort and reassurance of coming back together into a huddle as the game comes to a close.
The games have no winners and losers, only experiences. In the huddle the children have a chance to share their favorite escape from a tag or congratulate a classmate for giving them an excellent chase. The teacher then may make observations of their play and emphasize the positive feelings resulting from the game. Through play the students learn social conduct such as following the rules. They become aware of their bodies in space and develop foundations of movement. Grade 3 has Physical Education for forty-five minutes twice per week.

Grade 3 Student Learning Expectations
- Differentiate running, galloping, leaping, hopping, sidestepping
- Skip and run backwards
- Pass another on a log or beam without falling off
- Throw a ball at a target with proper body mechanics
- Catch a ball consistently
- Control one’s body enough to tag gently
- Jump into a swinging jump rope and move out cleanly
- Play by the rules of the game
- Stay focused and play the duration of the game with the group
- Listen attentively without disrupting
- Control one’s body without running into an object or person
- Enjoy the play

Grade 4
Fourth Graders are becoming more aware of their own space as well as that of those around them. They are like the Vikings, interested in exploring and in vigorous and challenging activities. Physical Education classes allow the children the opportunity, through games and activities, to challenge themselves and explore their abilities. They also experience the feeling of cooperation and the consequences of teamwork through games.

The games are presented in stories and images so as not to awaken the intellect. The goal of the games is success through team cooperation and individual improvement. For example when playing throw and catch games, if a team wins by improving its number of catches from one round to the next. The games are intrinsically demanding and lively, and provide opportunities for the students
to become more aware of others and be challenged physically. Good sportsmanship is constantly cultivated with the emphasis on playing out of the joy of participation. The students are forming a basis for healthy competition in which they respect their opponents, attempt to improve their own personal performance, and enjoy the process. Grade 4 has Physical Education for forty-five minutes twice per week.

Grade 4 Student Learning Expectations
• Play as a team player with good sportsmanship
• Throw a ball at a target at least 10 yards away
• Catch a small ball consistently from at least 10 yards away
• Switch from running to skipping to galloping to leaping to side-stepping to hopping easily
• Learn the more complicated rules of games in one period
• Listen attentively without disrupting
• Control one’s body without running into an object or person
• Enjoy the play
• Show respect and consideration for opponents

Grade 5
In Grade 5 Main Lesson blocks, the students study many ancient civilizations, including Greece. To supplement their learning and meet their development, the main focus of Physical Education in Grade 5 is the skill development to perform some of the same events that were held in the Ancient Greek Olympics.

Just as the Ancient Greeks pondered philosophy, were enlightened thinkers, and were in harmony, so is the 5th Grader. The students are in the balance between their last year of childhood and their first year of puberty. Teaching the ideals of form, dynamic movement, and the grace of the Ancient Greek Olympics meets the 5th Grader’s thirst for challenge. The emphasis when teaching the discus, javelin, running long jump, wrestling, sprints, and 300-meter run is on skill development so that the children perform with the grace and beauty of an ancient Greek athlete. The students’ thirst for challenge is met by the knowledge that in the spring they will gather, with at least three other Waldorf Grade 5 classes from the Southeastern United States, to reenact the Pentathlon of the Ancient Greek Olympics, and test their skills in competition.
Grade 5 has Physical Education for forty-five minutes twice per week. The students have one lesson a week focused on learning the skills of the Pentathlon and the other one is playing games. This meets the students as they are in a transition between play and sport.

Grade 5 Student Learning Expectations
- Run 300 meters with grace and beauty
- Sprint 40 meters with grace and beauty
- Throw a discus with grace and beauty
- Throw a javelin with grace and beauty
- Perform running long jump with grace and beauty
- Abide by the Olympic Oath
- Win with grace
- Lose with dignity
- Focus on improving their previous performance rather than comparing themselves to others
- Cooperate and support others in their quest to be their best

Grade 6
The 6th Graders’ soul experience penetrates into their muscle. They are seeking a new balance from the physical processes of puberty. The rapid growth of their limbs leads to clumsiness and a greater individual diversity of physique in the class. By participating in Physical Education class, the students are able to use their limbs with the goal of becoming more coordinated as they become acquainted with the change in physique.

The foundation has been laid for them to experience the joy of play and the habit of competing with themselves as they seek to improve their personal best. They are now more upright and ready to test their skills on an individual basis, but not necessarily wanting others to give attention to the results. Their readiness to measure themselves against others, but at the same time compete as part of a group, reflects their connection to the ancient Romans, whom they study in Grade 6. Therefore the Physical Education curriculum in Grade 6 is geared more towards team sports. They also study geometry, which carries over into these sports as they work the angles of the throws, kicks and defense. Grade 6 has Physical Education for forty-five minutes twice per week.

This is the first year the children are allowed to sign up for after-school sports teams. There are no tryouts; all interested students are accepted on the teams. Those who work hardest may earn more
playing time during a game, but all are counted as part of the team. The emphasis for 6th Graders in the after-school program is not on winning but on learning from the experience, as well as reaping the rewards of exercise and the advantages of being on a team.

Grade 6 Student Learning Expectations
• Demonstrate good form in performing warm up exercises
• Follow the rules and demonstrate basic skills of all games brought forth including, but not limited to, volleyball, football, pillow hockey, soccer, basketball, spaceball, speedball, wiffleball and ultimate Frisbee
• Demonstrate the ability to cooperate and participate fully in team activities
• Demonstrate the ability to listen to instructions without disruption
• Demonstrate the ability to win with grace and lose with dignity
• Demonstrate the ability to be a fully focused and participating team player

Grade 7
Seventh Graders are coming into their own, demonstrating increased strength, flexibility, and endurance. They are ready to focus on their skill development through more rigorous training. They are given more drills to improve their skills and are led on longer runs to improve their endurance.

Just as the artists and inventors they study in Grade 7 are able to use both the right and left sides of their brains, so can the 7th Graders. This allows them not only to work on their skills but also to learn to oversee the games and the factors that develop. They gain perspective on the game situations and start to use strategy to improve their game. Grade 7 has Physical Education for forty-five minutes twice per week.

Seventh Graders have the ability and confidence to separate from the group and expose their skills as they compete in after-school sports. Through this participation they become aware of where they are in relation to their surroundings, enhancing their sensory integration.

Grade 7 Student Learning Expectations
• Demonstrate the ability to play as a team player with good sportsmanship
• Demonstrate the ability to play their specific position in the sport or game
• Demonstrate the ability to play and understand all of the positions in all the games brought forth including, but not limited to volleyball, basketball, Ultimate Frisbee, soccer, and football
• Demonstrate precision in catching and throwing of smaller balls
• Improve their distance running
• Demonstrate consistently the basic skills of all the games brought forth, including but not limited to volleyball, basketball, Ultimate Frisbee, soccer, and football
• Experience, through their feeling life, the resultant physical effects of negative and positive emotions when playing games

Grade 8
Eighth Graders desire both independence and guidance. They require their feeling life to be challenged. They expect to be spoken to truthfully and to be guided. It is a time of struggle between being ready for high school and still being middle schoolers, so the PE class is a combination of both sports and games. In the fall the sports, games, and skills are reviewed. The increased use of strategy is encouraged. The class plays such sports as baseball and football during alternating blocks with individually-chosen games from their prior 7 years of school. Grade 8 has Physical Education for forty-five minutes twice per week.

The 8th Graders begin to feel the full weight of their developing physical bodies. They may feel both burdened by this change and energized by new strength. Eighth Graders have the opportunity both to play Middle School after-school sports, and to join High School sports practices, even playing in High School games if they are strong enough.

Grade 8 Student Learning Expectations
• Demonstrate the knowledge of all the rules and typical strategies in all games brought forth, including but not limited to baseball, volleyball, ultimate Frisbee, spaceball, pillow hockey, touch football, basketball, softball, and dodgeball
• Demonstrate the ability to use teamwork and strategies to gain advantages in games
• Demonstrate the balance/coordination exercises introduced in this class
• Demonstrate the ability to run 600 meters without a rest
• Demonstrate respect for teacher and classmates, consistent focus on task, and full participation in all activities

HIGH SCHOOL
Grades 9 and 10
Grades 9 and 10 meet for Physical Education for forty-five minutes twice per week. Although developmentally the 9th and 10th Graders are different, they have in common the transition into their thinking life from the feeling life of the Middle School years. As a result they are ready to start understanding as well as feeling their experiences.

The focus in the high school PE class is on sports or games that incorporate different systems (for example, circulatory, skeletal and metabolic) so that the students get a well-balanced experience. The students in Grades 9 and 10 do a different sport from the students in Grades 11 and 12. Ideally the sports they learn do not overlap during their time in high school, and they can learn a wider variety of sports. Students are graded on their participation, behavior, effort, and attitude.

Grades 9 and 10 Student Learning Expectations
- Be consistently on time for class
- Wear the proper attire and shoes for the activities
- Seek out the intention of the activity and fully participate
- Give best effort in every activity
- Show respect to teacher and classmates
- Demonstrate the skills of all activities brought forth
- Demonstrate positions, strategies, and rules of all games

Grades 11 and 12
Grades 11 and 12 meet for Physical Education for forty-five minutes twice per week. Although developmentally Grade 11 and Grade 12 are different, the students have in common their independence and their deepened inner life and thinking.

As with Grades 9 and 10, the focus is on sports or games that incorporate the different systems such that the students get a well-balanced movement experience. The students in Grades 11 and 12 participate in different sports in class from the students in Grades 9 and 10, so that ideally the sports they learn in these later grades are different from the ones they did earlier in high school and, as a result, they can learn a wider variety of sports. Students are graded on their participation, behavior, effort, and attitude.

Grade 11 and Grade 12 Student Learning Expectations
Be consistently on time for class
Wear the proper attire and shoes for the activities
Seek out the intention of the activity and fully participates
Demonstrate improvement in the exercises
Give best effort in every activity
Show respect to teacher and classmates
Demonstrate the skills of all activities brought forth
Demonstrate positions, strategies, and rules of all games

Sports Program for Middle and High School
The preparation for the sports program starts in Grades 3-4. The emphasis is on the joy of playing, playing with respect for the opponent, following the rules, supporting teammates, and trying to do one’s best. The joy of playing is emphasized by the teacher through the discussions in the huddle after the games. Continuing into Grade 5, the students learn that the habit life of competition is within their own being. Every time they work on a skill, they compare their performance not to that of others, but to their own previous performance. They also work on winning with grace and losing with dignity. At the Olympics they do compete against each other, but the emphasis remains on personal best. The unique talents of each Olympian are recognized along with specific accomplishments and records. Thus, the students come into the Middle School years with a healthy competitive foundation. They are able to participate fully and enjoy the external rewards of victory by winning with grace; handle the external issues of losing; and know that the internal rewards of giving their best are stronger than a loss or a win. They know to respect their opponents and congratulate them on their play, and they learn from their opponents so that they may improve.

The coaches in Middle School sports emphasize the students’ education through experience. They work on the students’ skills and allow the students to reflect on their own personal observations of how they played. With the emotions of adolescence in Middle School pouring out while playing, the students have the chance to decide which emotions or attitudes will be beneficial and which may impede their physical abilities or team play.

The coaches in our High School understand the benefits of allowing the students to have the opportunity to bring forth their own observations from the play, and to solve issues or suggest strategies themselves. This allows for the practice of critical thinking, cooperation, and leadership.
Farming

Program Description
Farming and agriculture is the root of all culture. Raising food feeds the most basic of human needs. It both relies on and is subject to the vicissitudes and gifts of the natural world. In the gardening program, students begin by learning how to garden. As they develop, they are exposed at a deeper and deeper level to all of the cultural, political, environmental and economic issues that are a necessary part of our agricultural system. Gardening teaches the students how to work with the natural world. It gives them a deep and meaningful understanding of where food really comes from and how much effort it takes to grow food. It teaches them the importance of working together in community to get a job done and allows them to have the satisfaction of hands on physical work with real and meaningful results.

The gardening program is currently limited to 3rd and 6th grades, but the plan is to add a grade to the program every one to two years. Student expectations for 3rd and 6th grades are included below.

Student Learning Expectations

Grade 3

- Master basic gardening skills: weeding, planting, feeding the soil, watering, harvesting, compost care
- Establish strong memories of the tastes, smells, sounds, touches and sights of the garden
- Demonstrate gratitude and respect for the four basic elements on which plants and people depend: earth, water, air, and sun
- Develop a recognition of how many hands come together and support each other to make a farm
- Know the four basic food plant categories: root, leaf, flower, fruit
- Know how the garden changes over time and with the seasons
- Experience seeing results of continuous effort
- Know the cycle of a plant’s life and the cycle of the seasons
- Know how weather, soil, insects, animals and humans interact with each other in the garden

Grade 6
• Understanding of the concept of stewardship: caring for the land to such an extent that it both gives back to you and is in better condition than when you started
• Choose and learn about plants to grow in the garden
• Develop a planting calendar to guide garden activities throughout the year
• Demonstrate in-depth understanding and skill in watering; weeds and weeding; soil and its care; composting; seedling germination and care; planting and transplanting; bed preparation; harvesting; seed collection and saving
• Listen attentively to stories about farms and different farming methods in different climate zones and different times in history
• Work together as a class to write letters to local farmers or other people involved in agriculture inviting them to write back or come visit the class and share their stories
• Know the different ecosystems on campus
• Understand about invasive species and how and why to control them
• Learn about watersheds by following the water on our own campus on a rainy day

Educational Support Program

The Educational Support program is overseen by the Educational Support Coordinator. This person is trained in Extra Lesson, an approach to supporting children academically and socially that is based on Rudolf Steiner’s’ indications of the development of the human being (lectures October 23-27, 1909, November 1-4, 1910, December 12-16, 1911).

Educational Support in the Early Childhood: The Educational Support Coordinator consults with teachers and parents as needed. The ES Coordinator will also observe in the classroom. The Coordinator works with the Kindergarten teachers observing the students who may be ready for Grade 1 to assess where they appear to be in their development.

Educational Support in the Grade School: During the early years, children progress through a series of developmental stages, which lay the foundation for capacities that support academic and social success in school and throughout life. Movement through play and games, along with rest and proper nutrition, supports progression through these stages. These early years focus on cultivating “body senses” which give the child the first feelings of self. When children feel comfortable with their bodies, they can more easily find a relationship to the space around them through balance and movement. When developmental milestones are met in a healthy way, the foundations for learning
can unfold unencumbered. Regardless of a child’s intelligence and early experiences, some lags or blockages in these milestones can occur, resulting in poorly controlled movement, speech difficulties, academic challenges, organizational or management problems, and emotional stress. If there are lags in development stages, higher cortical areas must take over functions, which may result in a loss of concentration, learning difficulties, and stress for the child. Many children today show an inconsistent pattern of development even though they were raised in a supportive environment. However, there are many ways to intervene and help the children reach their full potential.

Students may be referred at any time for Extra Lesson services. All Grade 2 students receive an Extra Lesson assessment with a reading and math screening. Initial Extra Lesson classes can evaluate the stages of development and assess whether they have progressed as expected or if some support is needed to complete a developmental stage. Continuing Extra Lesson classes are offered for individuals, small groups, or whole classes at the recommendation of a teacher. A series of Extra Lesson classes typically lasts for 6 weeks. Students may complete only one session or have years of Extra Lesson work. These lessons include specifically-designed movement, painting, form drawing, and clay activities taught by the Educational Support Coordinator.

The Educational Support Coordinator also can make referrals for care providers outside of the school. The referrals may be based on direct observation and/or consultation with the teachers and parents. A referral list is available for any teacher or parent who requests the list.

The Educational Support Coordinator also supports tutoring at the school. Currently, parents pay tutors directly for services. The Coordinator supports the work of the tutor and communication with the teacher and parents as needed. There were 6 tutors during the 2013-2014 school year in the areas of reading, writing, spelling, math, study skills, and Spanish.

Educational Support in the High School: The Educational Support Coordinator consults with teachers and parents as needed. The High School Coordinator and teachers also arrange for tutoring and outside referrals directly.

**In evaluating the needs of students, we operate from a hierarchy of need.**

In seating a student behind a desk at the beginning of first grade, we as teachers and parents are hoping or expecting that the child is ready, or soon will become ready, for classroom work. But
realistically, every child will struggle with some aspect of this new environment: it might be a challenge to sit in balance on a chair, or to listen quietly, or to muster the fine motor skills for writing. It bears repeating: every child will meet some individual barriers during the move to the new civilization into which he or she has now been placed by parents and teachers. Therefore, the child at this age will be best served by a curriculum that breathes in and out, flows between difficult new tasks on the one hand, and familiar, relaxing and supportive activities on the other. With this flow, most children will be able to adjust to the new order of things, and progress.

However, some children will require additional individual support before our hopes for them can become possible. Very often, in one way or another, the child is the one who lets the adults know that more help is needed. (As teachers we have to battle to keep in mind that a “discipline problem” might well be just such a signal.)

Whatever the signs are that more help is needed, our role as adults is to thoughtfully and carefully decide what kind of individual attention is needed. Both common sense and careful contemplation tell us that there is a hierarchy of needs and support within which we must work.

The realm of the Physician
Is there a medical/physical problem or a constitutional imbalance? No amount of individual attention from a Teacher can fully help a child who has, for example, an undiagnosed vision or hearing problem, or an unknown food allergy that is driving her off the deep end. Problems of this nature are the domain of the Physician. Additionally, a child may have an excess of one temperament or another (i.e. the overly sanguine child who just cannot focus, or the highly phlegmatic child who can only write one page while the others are writing five, etc.). Teachers can work with this aspect to a degree, but a pronounced constitutional problem is also in the domain of the Physician, perhaps working in concert with a Therapeutic Eurythmist and/or a Homeopathist.

The realm of the soul
Is the problem in the realm of the psyche? If there is a family crisis, or a struggle with parenting, or an educational psychological problem, certainly the Teacher can provide a calm and loving classroom; but needs in this area will also demand outside professional help, and possibly a specialized classroom or an Individual Educational Plan.

The realm of early childhood development
Is the problem developmental? Many aspects of learning readiness—for instance spatial orientation, movement coordination, and the ability to change sight perception instantaneously between three-dimensional and two-dimensional space—are the results of the child’s body/environment movement exploration during the first seven years. A developmental assessment or a Sensory Integration assessment can identify such things as retention of early reflexes or ambidexterity, lack of good body image, hypersensitivity or hyposensitivity, lack of spatial orientation, inability to make mental pictures of sense impressions, and dyslexic symptoms. Without these faculties, no curriculum, even a Waldorf curriculum, fully works. Needs in areas like these can be addressed through a team effort by the child’s teachers plus individual attention for Extra Lesson or Occupational Therapy/Sensory Integration.

The realm of teaching and tutoring
Is there a need for extra skill-building and skill repetition? Needs in this realm can also be addressed as a team effort with additional individual attention in reading or math classes plus tutoring.

Models for Observation and Reflection
The Hierarchies of Need - a Vital Starting Point
In considering the needs or challenges of a child, it is important to try to form the clearest idea of which hierarchy or hierarchies might need to be addressed. These are:

• Medical/constitutional – the realm of the physician, as well as the Therapeutic Eurythmist and/or Homeopathist guided by the physician.
• Soul/psyche – the realm of the parent, priest or psychologist
• Developmental/pedagogical – the realm of the teacher

Medical/Constitutional
1. Allergies or chemical imbalance
2. Birth
3. Injuries or illness
4. Six constitutional types
5. Excess of temperament
6. Heredity

Soul/Psyche
1. Home life
2. Biography
3. Cognitive testing
4. Laterality and dyslexia
5. Birth order

Developmental/Pedagogical
1. Movement stages
2. Twelve senses
3. Six constitutional types
4. Four temperaments
5. Stretching and lifting
6. Developmental keys: timing & rhythm; direction & goal; spatial orientation; sequencing; fine motor control & speech; laterality; midline barriers; imitation & anticipation; reflexes; radius & ulna; eye movement
7. Family background of learning difficulties
8. Learning style
9. Home background for vocabulary, numeracy, will forces, etc.
10. Breathing; laughter and tears
11. Dyslexia
12. Nonverbal learning delay