# Rudolf Steiner School of Ann Arbor <br> Lower School Scope and Sequence 

2022-23

## The Lower School Program

## Overview

A basic tenet of Waldorf education is matching the child's developmental stage with the curriculum. Young children learn by doing and live strongly in their imaginations; our Early Childhood program is designed with this in mind. In grades one through eight it is crucial that children's feelings are engaged in the learning process; this is accomplished through the arts that permeate the curriculum and guide the teachers' presentations. We work actively during this time with the students' imaginations and aim to strengthen their memories and habits. The 6-8 grade curriculum also takes into account the students' dawning powers of adult thinking and guides them to awaken and develop these capacities that will take them through High School.

The task of teachers in the Lower School is to provide instruction, inspiration and an environment in which every student can flourish. Stories, poetry, drama, music, movement, drawing, painting and other creative means are employed to enliven lessons, actively engage students, and address their varied learning styles and personal strengths and weaknesses. To create the most significant connection to the subjects, students in all grades create their own individual records of the material covered. Through writing, drawing and other media every student creates their own Main Lesson book developing a variety of expressive skills. As with the pedagogical content, the nature of the materials used and assignments given evolve as the students mature. Classes use these Main Lesson books as textbooks, enjoying active, individual involvement with the subject matter.

Our teachers remain with the same group of students for multiple grades. Not only is the teacher's intimate knowledge of the children a tremendous advantage, but the connection of material and experiences across the years promotes a cohesive, comprehensive education. The class teacher's commitment to the students fosters trust and allows for the fruits of long-term relationships. Although the class teacher is the primary teacher during the first eight grades there are also a number of subject teachers who are experts in their fields who also teach the children--world languages, art, vocal music, instrumental music, handwork, woodwork, eurythmy, movement education, and, math in grades five through eight. For those who need extra help, there are educational support teachers for reading and math skills.

## Grade 1

Academic instruction in first grade centers on letters and numbers and is grounded in the knowledge that first graders live deeply in imaginative experience. The alphabet and phonics are introduced through stories and pictures, and reading instruction grows out of the students' own writing. Math incorporates imagination, movement, rhythm and hands-on manipulation of objects as the students work on number sense and learn about the four processes (addition, subtraction,
multiplication and division). Daily movement time features engaging activities that promote spatial awareness, sensory integration, large and fine motor development, social grace and musical/rhythmic sensibility. Form drawing, beeswax modeling and knitting further develop spatial awareness and fine motor coordination. Nature stories build a foundation for later studies of animals, botany, meteorology, mineralogy, astronomy and physics. Stories, poetry and songs of many cultures are the basis of social studies in first grade.

## Grade 2

Second graders are eager to learn and meet challenges with enthusiasm. As their individual personalities show more clearly, the students openly share their likes and dislikes and enjoy experimenting with the many dimensions of their burgeoning soul life. Generosity and selfishness, truth and deceit, diligence and laziness are all tried and tested. The second grade language arts curriculum supports the developing second grader through the telling of stories about selfless, noble human beings carefully and thoughtfully contrasted with trickster tales and other
fables. The students copy short excerpts of the stories from the chalkboard, and by the end of the year will write short compositions on their own. The study of phonics study supports continued advances in independent reading. Math studies include the introduction of place value, making a calendar, and continued practice with the four processes. Nature stories and experiences continue to support the early science curriculum. Native American legends support the fostering of wonder and respect for the natural world.

## Grade 3

Now in their ninth or tenth year, third grade students gradually realize that the magical time of earlier childhood is coming to an end. Although they are more competent in their skills, there is an accompanying uncertainty and wistfulness for the security of the past. They may become moody, melancholy, or, at times, even defiant. This inner soul mood is met with stories from the Hebrew Bible, beginning with Adam and Eve being driven from Paradise. Stories of Moses and other Old Testament figures speak of individual trials and the faithful support of divine guidance. As the students awaken to this "real world," we offer them many opportunities to build confidence through practical work: planting and harvesting, preparing and serving a Thanksgiving Feast, measuring, sawing and hammering. There are Farming and Building Main Lesson blocks and field trips where students witness blacksmiths, bakers, carpenters and others willing to share the skills of their trades. In language arts, dictionary skills are learned and grammar is introduced in a lively way. In arithmetic, there is a focus on measurement, including practical activities with linear measurement, weight, capacity and time. Long division is introduced; multiplication tables and work with the four processes is continually practiced.

## Grade 4

Typically, fourth grade students are exuberantly engaged with their school work and full of budding personality. They enjoy drama and thrilling stories and thus delight in hearing tales from Norse Mythology. These legends offer an appealing contrast to the Hebrew stories of third grade. Students practice arithmetic skills for increased speed and accuracy. In the mathematics Main Lesson blocks, it is now appropriate to introduce the students to the world of fractions. Language arts blocks include lessons in grammar (parts of speech and verb tenses) and increased composition work. Students read fine children's literature independently as well as in groups. Spelling, grammar and writing skills are practiced regularly. Students may receive reading tutoring as individuals or in small groups. Social studies blocks include the early history and geography of Michigan, with an emphasis on local geography and its influence on the history and culture of Ann Arbor. In a Zoology block the students study the characteristics of many different animals and how each relates to the human being.

## Grade 5

Waldorf schools often describe fifth grade as the golden age of childhood. The students are poised between the natural joy and grace of the young child and awakening adolescent challenges. Imaginative play lives side-by-side with new thought capacities and an intrinsic sense of beauty. The fifth grade curriculum both nurtures and challenges students. Exploring the geography, customs and mythology of diverse ancient cultures at their height, culminates in a study of ancient Greece, a glorious moment in evolving human culture. The North American Geography block helps children place themselves more firmly in the world as it expands their knowledge and understanding of other people and places. They learn how geographical features contribute to human culture. The richness of the plant world is explored in the Botany block. The plant is rooted to the Earth but called forth by the sun, an appropriate image for students poised between childhood and adolescence. Mathematics studies include learning about decimal, fractions and, without compass and ruler, an introduction to geometric drawing.

## Middle School Grades

In addition to the responsibilities and opportunities in the classroom, we offer students in grades 6-8 a variety of different experiences in our wider community. They can participate on athletic teams and music festivals, facilitate recycling and composting for the school, serve on a student social action committee, organize and attend school dances, fundraisers and support the lower grades and Early Childhood with their festival celebrations.

## Grade 6

Following the balance and grace of fifth grade, sixth grade can be marked by turbulence and change physically, intellectually, emotionally and socially. Articulate and argumentative, many children are
quick to identify flaws and call for fairness. We meet them with a curriculum that calls for precision and accuracy, and subjects that build capacities for independent thinking and individual initiative. In History they study the order and structure of ancient Roman society. Etymology and grammar bring awareness of language structure. In Physics they are guided to careful, accurate observation; clarity in thinking, speaking and writing about those observations is demanded. Additional work in social studies centers on the Middle Ages and world geography. Mathematics features a block on business math, as well as their first taste of formal geometry. Geometric tools such as a compass and protractor are introduced. Other sciences include geology and astronomy, which are studies that ground the awakening student between the world above and the one on which $\mathrm{s} / \mathrm{he}$ stands.

## Grade 7

Armed with new self-awareness and a growing sense of independence, seventh graders are ready to substantially expand the scope of their studies. We recognize their nascent power of thought and begin to address it. In mathematics we introduce algebra, explore irrational numbers including pi and work with the Theorem of Pythagoras. In the sciences, we continue the study of physics (expanding to include the mechanics of simple machines), start a two-year exploration of the human body, and introduce chemistry, for which comprehending the inner changes of matter can be a formidable challenge. Language arts studies involve a block of creative writing, and studies of world geography continue. The heart of seventh grade social studies centers on an intensive look at Renaissance history, including changes in art, science, world exploration, religion and politics. As the students experience their own internal renaissance, these stories that illustrate the upheaval and dawning of modern culture and society provide inspiration and assurance.

## Grade 8

Leaving childhood behind, adolescent eighth graders question adults and institutions. Their growing powers of analytical thought and greater awareness of, and interest in, the world call for teachers who can satisfactorily answer their questions and can serve as adult models worthy of respect. In addition to the blocks taught by the class teacher, each year two or three eighth grade blocks are taught by guest specialists, either High School teachers or other members of the Faculty with expertise in a particular field. The class teacher continues to oversee the class social form and attends to each student's challenges and needs. S/he facilitates the many class activities, including community service, a 7-10 day trip, and a large-scale dramatic production. Social studies include two- three blocks on American history, touching on key topics from the European colonization of the new world to the mid20th century, and a block on world geography. The science curriculum is rich and deep, with blocks on physics, chemistry, anatomy and meteorology. The sciences are taught practically rather than theoretically and are a hands-on experience for the students whenever possible. In mathematics, they construct three-dimensional Platonic solids and continue their study of geometry. Students read
a wide variety of books: plays, poetry, historical fiction, classic literature, etc. They also continue to use non-fiction resource materials and may do one or more special research projects.

## Disciplines of Study

## Language Arts Curriculum - Early Childhood

The Early Childhood curriculum includes a language arts circle. Each morning, circle time presents an opportunity for children to work on various skills including memory, listening, and imagination. In addition, daily storytelling and puppetry build vocabulary, sequencing and auditory abilities.

## Curriculum

- Stories, poetry and song (rhymes, verses)
- Games
- Puppet plays
- Circle activities and other planned movement activities to enhance spatial awareness including:
- Practicing and helping develop midline crossing
- Specific gross motor movements
- Eye tracking/convergence activities to strengthen eyes
- Experience of geometric forms in space
- Ample free play with others that provides conversation opportunities
- Guided "acting out" of stories
- Modeled clear speech
- Self-care skills
- Setting snack table
- Print recognition \& awareness
- Books available inside the classroom
- Library visits
- Reading books to children
- Providing a rich, strong foundation for skills students will need as they progress as readers and writers in elementary school, including:
- Phonological development (a child's evolving ability to hear, discriminate, segment, and manipulate phonemes in words)
- Semantic development (vocabulary growth, meanings of words)
- Syntactic development (grammatical relationships, e.g., how word order affects meaning)
- Morphological development (a child's acquisition and use of the smallest units of meaning ("s" for plurals, "-ed" for past tense)
- Pragmatic development (a child's ability to perceive and use the social-cultural "rules" of language in its natural contexts)


## Goals

- Develop listening skills
- Develop sequencing skills
- Develop memory
- Develop ocular health and strength
- Develop ability to picture inwardly
- Develop communication skills
- Develop love of story and enhanced facility with language
- Develop imagination


## Language Arts Curriculum - Grade 1

## Reading

- Early Childhood goals will continue and advance.
- Learn the printed alphabet and sound correspondences for consonants through picture and story. (Not every consonant needs this treatment, just enough to provide the connection to abstract letters arising from pictures.)
- Learn how letters connect to the sounds of language.
- Connect large and small units of sound to the written word.
- Blend together sounds to form words.
- Work on building a sight word vocabulary (at least 15-20).
- Learn verses, copy them from the chalkboard and "study" the text creatively (with the teacher's lead).
- Retell parts of stories and participate in play-acting them.
- By early spring of first grade students will begin writing their own sentences and "stories" with "creative spelling."
- Read from the books they have written.
- Read from printed texts in the classroom according to skill level.
- Recognize and learn sounds associated with QU, PH, TH, CH, WH and SH
- Recognize and learn initial consonant blends (e.g., PL, ST, CR).
- Introduced to Word families.
- Learn to differentiate consonants and vowels.
- Learn at least two sounds for each vowel (short and long).
- Introduced to consonant-vowel-consonant (CVC) words.
- Listen for sounds at the beginning, middle and end of words.
- Learn to clap syllables.
- Introduced to "Silent e"
- Learn and practice lower case letters.


## Speech and Conversation

- Poems and circle verses, tongue-twisters
- "Sharing" time
- Retelling parts of stories or lessons
- "Tea Time" with appropriate modeled conversation topics

Plays are generally a part of each year's curriculum \& involve all students.

## Writing

- Students should be able to copy from the chalkboard several printed lines, in both upper and lower-case manuscript letters. (This should be done frequently each week in the spring of the year.)
- Copy text from page that has been handwritten by teacher. Student writes in graphite onto paper.
- Students should be able to write at least 1-2 sentences on their own.
- Introduce end punctuation.


## Language Arts Curriculum - Grade 2

## Reading

Skills

- Review and expand all Grade 1 skills
- Phonics:
- Soft "c" and "g"; R - Family (ar, or, er, ir, ur); silent 3 continued; vowel teams (ee, ai, ay, oe, oa, ue, ui) (ea = /short e or long e/); (three sounds for " $y$ "); "ck", "dge", "tch", "ight"; -ost; -ind; old; -ild can be taught as word families
- Diphthongs (oi, oy, ou, ow, oo, au, aw)
- If time allows, introduce cautionary vowel combinations (ei, ey, eigh, eu, ie, ew)
- Concept of Plural
- Prefixes (un, re, in, dis)
- Suffixes (s, es, ed, er, est, en, ful, ly, less, ness, ment)
- Increase Sight Word vocabulary (3-5 new words per week)


## Speech and Conversation

- Poems and circle verses, tongue-twisters
- "Sharing" time
- Retelling parts of stories or lessons
- "Tea Time" with appropriate modeled conversation topics
- Students may regularly recite their own poems
- Drama (for example, class play)


## Writing

- Paragraph writing (dictation, creative spelling, factual recall)
- Capital letters and end marks (period, question mark, exclamation point.)
- Sustained Silent Reading (begin with 3 minutes and work up to 12-15)
- Decoding nonsense words
- Strengthen comprehension and vocabulary through story and verse, reading, retelling, dramatization, writing - What did you like about the book/story, play with words
- Introducing cursive writing, beginning with form drawing, in second grade
- Students should be able to write sentences on their own and should be able to copy a 4-6 sentence paragraph from the chalkboard.
- They should be involved in composing chalkboard texts.
- Cursive handwriting may be introduced in second grade.
- Punctuation: introduce comma and quotation marks.


## Language Arts Curriculum - Grade 3

## Reading

- Continue developing skills begun in earlier years
- Review all vowel and vowel combinations previously taught
- Review consonant blends and word families
- Practice syllable segmentation and blending
- Read in small groups, read as a class, read independently, read with a partner, teacher continues to read aloud, silent sustained reading
- Vocabulary building (spelling lists for decoding and spelling)
- Spelling strategies/rules
- Continue building Sight Word vocabulary and spelling vocabulary
- Read non-fiction books or articles to prepare for curricular projects such as reports on shelters


## Speech and Conversation

- Poems and circle verses, tongue-twisters
- "Sharing" time
- Retelling parts of stories or lessons
- "Tea Time" with appropriate modeled conversation topics
- Students may regularly recite their own poems
- Speaking about their shelter projects to students from other classes
- Drama (for example, class play)


## Writing, Spelling, Grammar

## Spelling

- A weekly spelling list could be printed on the chalkboard so the students can review it with the teacher daily.
- Suggested: approximately 10 words that contain a pattern from those in the first through third grade reading curriculum, and sight words.
- Students could take the words home to study and a quiz can be given.


## Grammar

- This is a separate block for the first time.
- Introduce terms and functions of verbs, nouns, adjectives and adverbs
- Introduce four kinds of sentences and accompanying punctuation: commands, exclamations, statements and questions.


## Writing

- Four kinds of words (doing, naming, picturing/describing, how words)
- Spend most of time on doing and naming words
- Students should be able to retell parts of stories in writing. (These should be corrected by the teacher and then written by the student into the Main Lesson book.)
- Students should be able to write paragraphs of at least 3 sentences.
- Students should be able to write dictated sentences.
- Cursive handwriting should be regularly practiced, but students could compose in print.
- Develop paragraph writing further
- Student Main Lesson book entries should be a mix of their own compositions, dictations and copying from the chalkboard text that has been thoroughly "studied" with the teacher
*Read non-fiction books to prepare for curricular projects such as reports on shelters. If reports are assigned, the teacher should provide guidance during class time.


## Language Arts Curriculum - Grade 4

## Reading

Goals

- Read at grade level, or above, as determined by standardized reading assessment
- Maintain attention during silent sustained reading for 15-30 minutes
- Increase quantity of books read
- Read student-chosen books from several genres
- Cultivate fluent, independent readers
- Read books for pleasure and information
- Increase the quantity and variety of books read
- Teachers will continue to read aloud to their classes (2-3 classics each year)
- Individual reading support and small group work will be provided for children who do not read at grade level, or who need additional practice


## Provide a list of readers available grades 4

## Speech and Conversation

- Poems and verses
- "Sharing" time
- Riddles
- Retelling whole stories \& lesson content
- Possible oral book reports/animal reports
- Grade-appropriate speech exercises and poems with strong alliterative content are especially effective and pedagogically important here
- Drama (for example, class play)


## Writing, Spelling, Grammar

## Spelling

- There should be a longer weekly spelling list, daily work with the words and a quiz.
- Practice spelling, alphabetizing, syllables, dictionary skills, spelling rules, punctuation, etc.
- Challenge words and vocabulary words from Main Lesson can be included.


## Grammar

- Review 4 parts of speech and introduce the rest (pronouns, prepositions, articles, conjunctions, interjections).
- Introduce verb tenses (past, present, future) and active and passive verbs.


## Writing

- Review lessons where key words are written on the chalkboard
- Students should be able to summarize lesson content or a passage read
- Retell entire stories in writing.
- Longer dictations
- Corrected drafts should be copied into Main Lesson books.
- Original compositions or dictations should make up at least one third of the written pages in Main Lesson books.
- Students should be able to answer reading comprehension questions in writing.
- Suggested: original poetry writing, and writing thank you notes.

Read non-fiction books to prepare for curricular projects such as reports on animals. If reports are assigned, the teacher should provide guidance during class time.

## Language Arts Curriculum - Grade 5

## Reading

- Read at grade level, or above, as determined by standardized reading assessment
- Maintain attention during silent sustained reading for 15-30 minutes
- Increase quantity of books read (30-40 books per year)
- Read student-chosen books from several genres
- In Grade 5, read assigned texts and answer comprehension questions
- Cultivate fluent, independent readers
- Read books for pleasure and information
- Increase the quantity and variety of books read
- Teacher resource "The Book Whisperer"
- Teachers will continue to read aloud to their classes (2-3 classics each year)
- Individual reading support and small group work will be provided for children who do not read at grade level, or who need additional practice

Provide a list of readers available grade 5

## Speech and Conversation

- Poems and verses
- "Sharing" time
- Riddles
- Retelling whole stories \& lesson content
- Possible oral book reports/animal reports
- Grade appropriate speech exercises and poems with strong alliterative content are especially effective and pedagogically important here
- State or regional reports
- Botanical reports
- Greek (beginning of Homer's Odyssey) /poems with dactylic hexameter
- Drama, for example, class play


## Writing, Spelling, Grammar

## Spelling

- There should be a longer weekly spelling list, daily work with the words and a quiz.
- An accompanying worksheet can provide practice with spelling, alphabetizing, syllables, dictionary skills, spelling rules, etc.
- Challenge words and vocabulary words from Main Lesson can be included.
- Include words with Greek roots (Overall etymology is explored)


## Grammar

- Review all previous grammar work.
- Focus on use of quotation marks and introduce colons.
- Introduce prepositional and adverbial phrases.
- Examine sentence and paragraph structure.
- Work with abstract nouns and collective nouns, subject/verb agreement, active and passive verbs, comparative and superlative forms.


## Writing

- Student reports and compositions should grow in length and complexity.
- Dictations can be longer.
- Instruction on proofreading skills should be given
- Students should rely progressively less on teacher corrections to their drafts
- Increasingly, misspellings and improper punctuation should be marked by the teacher and corrected by the student.
- Summaries of read passages should grow longer.
- Letter writing should be introduced and practiced.

Read non-fiction books to prepare for curricular projects such as reports on states and/or botany. If reports are assigned, the teacher should provide guidance during class time.

## Language Arts Curriculum - Grade 6

## Reading

- Fluent, independent readers
- Read books for pleasure and information
- Increase the quantity and variety of books read
- Teacher resource "The Book Whisperer"
- Individual reading support and small group work will be provided for children who do not read at grade level yet, or who need additional practice
- Read at grade level, or above, as determined by standardized reading assessment
- Maintain attention during silent sustained reading for 15-30 minutes
- Increase quantity of books read
- Read student-chosen books from several genres
- Read self-selected and assigned texts that relate to the main lesson curriculum and answer comprehension questions

Provide a list of readers available grade 6

## Speech and Conversation

- Reviewing and discussing lesson content
- Poems and verses, longer and even more challenging
- Latin proverbs
- Reports
- Oral book discussions in small groups
- Drama, for example class plays

Writing, Spelling, Grammar
Spelling/Vocabulary

- Weekly lists and quizzes with regular work with etymology and grammar, spelling rules, prefixes and suffixes


## Grammar:

- Review previous work.
- Introduce colon and semi-colon.
- Conditional sentences.
- Students should work regularly with grammar lesson workbooks


## Writing:

- Bring more consciousness to students' composition styles, organizing their writing, expanding or contracting what they express.
- They should be able to summarize lessons, retell stories, write concise reports for physics experiments, and write book reports for non-fiction as well as fiction books.
- Calligraphy should be introduced and practiced.

Read non-fiction books to prepare for curricular projects such as reports on Ancient Rome and/or the Middle Ages. If reports are assigned, the teacher should provide guidance during class time.

## Language Arts Curriculum - Grade 7

## Reading

- Fluent, independent readers
- Read books for pleasure and information
- Increase the quantity and variety of books read
- Individual reading support and small group work will be provided for children who do not read at grade level yet, or who need additional practice
- Read at grade level, or above, as determined by standardized reading assessment
- Maintain attention during silent sustained reading for 15-30 minutes
- Increase quantity of books read
- Read student-chosen books from several genres
- Read self-selected and assigned texts that relate to the main lesson curriculum and answer comprehension questions

Provide a list of readers available grade 7

## Speech and Conversation

- Reviewing and discussing lesson content
- More poetry \& verses
- Shakespeare
- Oral reports
- Biographies
- Related to the Renaissance/Age of Exploration


## Writing, Spelling, Grammar

Spelling/Vocabulary:

- Continue etymology study.


## Grammar:

- Review previous work.
- Work with a grammar workbook


## Writing:

- Main Lesson blocks: Poetry (including various meters) and/or Wish, Wonder and Surprise.
- Most Main Lesson book entries in all blocks should be original compositions.

Read non-fiction books to prepare for curricular projects such as reports on World Explorers, the Renaissance, and/or Geography. If reports are assigned, the teacher should provide guidance during class time.

## Language Arts Curriculum - Grade 8

## Reading

- Fluent, independent readers
- Read books for pleasure and information
- Increase the quantity and variety of books read
- Individual reading support and small group work will be provided for children who do not read at grade level, or who need additional practice
- Read at grade level, or above, as determined by standardized reading assessment
- Maintain attention during silent sustained reading for 15-30 minutes
- Increase quantity of books read
- Read student-chosen books from several genres
- Read self-selected and assigned texts that relate to the main lesson curriculum and answer comprehension questions


## 8th Grade Readers

- Chains, Forge, and Ashes (series), by Laurie Halse Anderson
- Sophia's War, by Avi
- Letters from a Slave Girl, by Mary E. Lyons
- Sojourner Truth: Ain't I A Woman?, by Frederick and Patricia McKissack
- April Morning, by Howard Fast
- Hidden Figures (young reader's edition), by M.L. Shetterly
- Lyddie, by Katherine Patterson
- Mrs. Chippy's Last Expedition, by Caroline Alexander
- The Endurance, by Alfred Lansing
- The Boys in the Boat (young reader's edition), by Daniel James Brown
- Stones in the Water, by Donna Jo Napoli
- Out of the Dust, by Karen Hesse
- The Boy Who Harnessed the Wind, by William Kamkwamba and Bryan Mealer
- Johnny Tremain, by Esther Forbes
- Little Women, by Louisa May Alcott
- The Diary of Anne Frank
- Esperanza Rising, by Pam Munoz Ryan
- The Fighting Ground, by Avi
- The True Confessions of Charlotte Doyle, by Avi
- The Witch of Blackbird Pond, by Elizabeth Speare
- Across Five Aprils, by Irene Hunt
- Life is So Good, by George Dawson and Richard Glaubman
- Works by Frederick Douglass
- Roll of Thunder, Hear My Cry, Mildred Taylor
- Sadako and the Thousand Paper Cranes, by Eleanor Coerr


## Speech and Conversation

- Poetry
- Speeches (e.g. "Ain't I a Woman," or Gettysbury Address, etc.)
- Reviewing and discussing lesson content


## Writing, Spelling, Grammar

Spelling/Vocabulary

- Continue etymology study.

Grammar

- Review previous work.
- Diagram sentences.
- Work with a grammar workbook.


## Writing

- Most Main Lesson book entries in all blocks should be original compositions


## Life Skills Curriculum

## Grade 4

## Human and Animal Block

- Foster appreciation for upright stature, free and skilled hands and arms, ability to think and to speak
- Recognition of a human being's 3-fold nature (head/trunk/limbs; thinking/feeling/willing)
- Impart an understanding for how an animal's form dictates its special proclivities
- Practice comparing and contrasting forms and abilities of humans and animals, including sense perception, movement, metabolism, environment
- Enjoy the variety and delight of the animal kingdom
- Learn about reproduction (minus the technical details of copulation): nesting, gestation, birth and caring for young; all animals grow to maturity and become able to reproduce; human beings take a long time to reach maturity relative to other animals
- In general terms address: as human beings grow to maturity their bodies gradually change. Boys voices will deepen and certain body parts will grow larger. Both boys and girls will notice hair growing under their arms and around their genitals. They will begin to notice body odors they haven't had before. Girls bodies will develop so they can become pregnant and "grow" a baby inside their wombs. Their breasts will grow so they can nurse the babies they bear.


## Media and Technology

- Encourage parents to take advantage of CyberWise resources. Explore some of these topics in parent evenings.
- Offer a parent reading list, suggesting books such as Consuming Kids
- Encourage parents to take advantage of links on our school website that address issues of contemporary concern. (Still a work in progress.)
- Hold teacher/student conversations regarding the influence of advertising on food, clothing, music, behavior, etc.
- Discreetly communicate that a for-profit motive can conflict with what is best for us.


## Social Skills

- Be vigilant with regard to classroom and playground conflict. Whenever appropriate, full class discussions should occur to process, understand and resolve conflicts. Utilize Kim Payne's Social Inclusion methods.
- Help students to recognize bullying, deliver clear messages and know exactly how to seek help.
- Have students practice listening skills and patience but give them a chance to express themselves and offer guidance on how to do this effectively.


## Bodily Changes

- Hold an informal "tea or lunch with the girls" to address menses, including how one can easily manage this at school.
- Ask trusted class parents, one male and one female, to meet with the group of boys and that of girls, respectively. The class teacher will first meet with the parents to talk about the nature of the conversation and will recommend reading materials, for example, Trailing Clouds of Glory.


## Grade 5

Pentathlon preparation (caring for one's health); class teacher and movement teacher are responsible for teaching:

- Exercise
- Eating well (including consideration of diets in other times and cultures)
- Adequate sleep
- Good hygiene
- Medicinal plants
- Avoiding junk food, tobacco, alcohol, drugs
- Respect for different body types and physical abilities
- Knowing and caring for one's self
- Testing and respecting personal limits


## Media and Technology

- Encourage parents to take advantage of CyberWise resources. Explore some of these topics in parent evenings.
- Discuss with students how the advertising industry manipulates taste and desire with rapid imaging, loud messages, sex appeal, etc.
- Discuss with students the influence of media images on self-perception and social norms


## Social Skills

- As in $4^{\text {th }}$ grade, but with the expectation of more student insight and responsibility


## Bodily Changes

- Suggested: 3 Main Lessons to address what to expect in adolescence. A visiting professional may be invited to the class. See the Sex Health and Teen Development Curriculum for more information.
- Male and female physical changes (part of this will be related to the entire class; boys and girls should be separate for more in-depth discussions)
- Emotional and social changes during puberty
- Influence of media (above)
- Hygiene and nutrition (above)
- Discuss how class can create a healthy, supportive school environment.


## Grade 6

- Suggested: class teachers set aside one week for a Health Main Lesson mini-block. A visiting professional may be invited to the class. See the Sex Health and Teen Development Curriculum for more information.
- Changing bodies (continued from $4^{\text {th }}$ and $5^{\text {th }}$ grades)
- Emotional health (friendships, relationships, feelings that accompany puberty, etc.)
- Good nutrition, eating disorders
- Substance abuse (tobacco, drugs, alcohol)
- Gender identity

Continue class discussions to address conflict situations, pressures of advertising, social media, peer pressure, styles in clothing, jewelry, etc.

Cyber Civics, Year 1 Curriculum (Digital Citizenship): This program will be introduced as a life skills period. Suggested: once per week over the course of 12 weeks.

## Grade 7

Physiology Block (Human Health and Life Skills)

- Sensory health
- Nutrition
- Digestive/respiratory/circulatory/reproductive systems
- Guest presenters for developing embryo, childbirth and human sexuality (Joann Bailey and Heidi Sproull)


## Ballroom Dance block (in movement class)

Life Skills (one period per week)

- Cyber Civics, Year 2 Curriculum (Information Literacy)
- Community service that will bring awareness to
- Needs of young children
- Needs of those nearing the end of life

Continue class discussions to address conflict situations, pressures of advertising, social media, peer pressure, styles. Bring in guest presenters as needed.

## Grade 8

Anatomy Block

- Muscles
- Bones
- nerve-sense system

Life skills (class one period per week)

- Cyber Civics, Year 3 Curriculum (Media Literacy)
- Community service that will bring awareness to:
- Food banks
- Homeless shelters
- Environmental issues

Continue class discussions to address conflict situations, pressures of advertising, social media, peer pressure, styles, etc. Bring in guest presenters as needed.

## Math Curriculum

## Grade 1

## Skills

- Skip counting by 2's, $3^{\prime} \mathrm{s}, 4^{\prime \prime} \mathrm{s}, 5^{\prime} \mathrm{s}, 10$ 's, 11 's
- Counting forward and backward 1-100
- Writing numerals 1-100
- Writing number sentences with the four processes
- Estimating
- Addition/subtraction facts up to 10 and all the doubles (6+6)
- Number journeys
- Neatness, beauty, and alignment of numerals


## Suggested Division of Skills by Block

- Numbers
- Quality of the numbers 1-12
- Regrouping
- Counting 1-24
- Writing numerals and Roman numerals 1-12
- Rhythmical counting 2's and 4's
- Even and odd numbers
- The Four Processes
- Introduce the four processes
- Counting 1-100
- Number dictations
- Writing numerals
- Rhythmical counting 2's, 3's, 4's, 5's, 10's
- Regrouping
- Arithmetic
- Writing number sentences ( $8=6+2,4=6-2,12=6 \times 2,3=6 / 2$ )
- Number dictations
- Writing numerals 1-100
- Rhythmical counting 2's, 3's, 4's, 5's, 10's, 11's
- Addition and subtraction facts


## Grade 2

Skills

- Skip counting forward and backward by 1's-12's
- Addition/subtraction facts by heart
- Counting 1-1000 starting anywhere
- Writing and reading numerals 1-10,000
- Estimating
- Subtracting and adding a two-digit and one-digit number
- Understanding multiplication and division ( $3 \times 2=6$ means "three groups of two makes six" and 12/3=4 means "how many groups of three fit in twelve")
- Calendar - year, seasons, months, days of the week
- Wonder of number - geometrical patterns
- Mental arithmetic
- Neatness, beauty, and alignment of numerals


## Suggested Division of Skills by Block

- Place Value
- Introduce place value
- Writing numerals 1-10,000
- Importance of zero as a place holder
- Number dictations
- Horizontal addition and subtraction with no exchanging (3465-2143=1322)
- Introduce the times and division tables
- Rhythmical counting 6's and 7's
- Calendar
- Create a calendar
- Practice writing numerals neatly and sequentially
- Skip counting 8's and 9's
- Vertical Addition and Subtraction
- Practice exchanging (ten ones = one ten, ten tens = one hundred)
- Vertical addition and subtraction without exchanging
- Vertical addition with exchanging
- Number and problem dictations to work on neatness and alignment
- Rhythmical counting 12's


## Grade 3

## Skills

- Skip counting 1's-12's and beyond for many children
- Addition/subtraction facts by heart
- Multiplication and division facts out of order
- Writing and reading numerals 1-1,000,000,000,000
- Estimating
- Horizontal addition and subtraction with and without exchanging (3021-1245)
- Horizontal and vertical multiplication with a single digit multiplier
- Horizontal and vertical division with a single digit divisor - No long division
- Division with remainders
- Measurement - length, mass, capacity, and time
- Mental arithmetic
- Neatness, beauty, and alignment of numerals


## Suggested Division of Skills by Block

- Vertical Addition and Subtraction
- Expand place value to billions and beyond
- Writing and reading large numerals
- Review vertical addition with exchanging
- Introduce sums with more than two addends (look for tens)
- Introduce vertical subtraction with exchanging
- Introduce checking of subtraction by adding
- Measurement
- Linear measure
- Liquid and dry measure
- Weight
- Measuring and telling time
- Money
- Vertical Multiplication and Division
- Vertical multiplication with a single digit multiplier
- Checking multiplication by adding
- Horizontal and vertical division (no long division)
- Remainders
- Checking division by multiplying with and without reminders


## Grade 4

## Suggested Division of Skills by Block

- Addition/subtraction facts by heart
- Multiplication and division facts out of order
- Writing and reading numerals 1-1,000,000,000,000
- Casting nines for checking
- Horizontal addition and subtraction with and without exchanging
- Horizontal and vertical multiplication with one, two, and three-digit multipliers
- Long division with two and three step problems
- Four processes with fractions
- GCF and LCM
- Equivalent fractions
- Reducing fractions
- Finding common denominators
- Mixed numbers and improper fractions


## Blocks

1. An Introduction to Fractions

- Reading and writing fractions and mixed numbers
- Understanding how a fraction can change as the denominator or numerator changes
- Drawing fractions and mixed numbers
- Changing mixed numbers into improper fractions and vice versa
- Counting by fractions ( $1 / 3,2 / 3,1,11 / 3$...)
- Fractional parts (e.g. 15/23 of the class has siblings)
- Adding and subtracting with common denominators

2. Casting Nines, Vertical Multiplication and Long Division

- Introduce casting nines as a way to check addition, subtraction, multiplication, and division
- Multiplying by 10, 100, 1000...
- Multiplying by 11
- Multiplying by a two digit or three-digit multiplier
- Long division with and without remainders; with and without fractional remainders

3. Fractions

- Comparing fractions (<, =. >)
- Equivalent fractions
- Multiples and Least Common Multiple
- Factors and Greatest Common Factor
- Multiplying fractions (including $2 / 3$ of 18 is 12 )
- Dividing fractions
- Renaming and reducing fractions
- Adding and subtracting fractions with unlike denominators


## Grade 5

## Suggested Division of Skills by Block

- Consolidation of all skills
- Fraction practice - fluency in working with common and unlike denominators
- Multiplying and dividing common fractions and mixed numbers should be thoroughly practiced
- Decimal fractions
- Estimating
- Metric measurement - distance, weight, capacity and review of U.S. system
- Freehand geometry - Pythagorean theorem, perimeter and area
- Working vertically and horizontally with the four processes
- Practice of arithmetic facts


## Blocks

1. Decimal Fractions

- Review place value
- Reading and writing decimal fractions
- Comparing decimal fractions
- Rounding
- Four processes with decimal fractions
- Simple equivalencies ( $1 / 2=5 / 10=0.5$ )

2. Metric Measurement

- Review of U.S. system and story of how the metric system came to be
- Estimation
- Linear Measurement
- Weight
- Capacity
- Simple conversions

3. Freehand Geometry and the Wonder of Number

- Free hand geometry
- Area and perimeter
- Pythagorean Theorem
- Square and triangular numbers
- Divisibility rules
- Perfect, abundant, deficient, and prime numbers
- Aliquot sum
- Sieve of Eratosthenes


## Grade 6

In the sixth grade, students have two main lesson blocks in mathematics - an introduction to geometry and business math. The math curriculum is supplemented by three skill-building periods per week where lessons from previous years' math lesson blocks are practiced. Topics for the review lessons include the four basic processes with whole numbers, fractions and decimals; percentage problems, and metric conversion, and divisibility rules. It is expected that by the end of sixth grade all students know their addition, subtraction, multiplication and division facts.

## Suggested Division of Skills by Block

- Geometry - tools, terminology, constructions, mensuration, angles
- Business math - percentages and formulas
- Adding, subtracting, multiplying, and dividing decimals, fractions, and mixed numbers
- Conversions among fractions, decimals, and percentages
- Review rules for divisibility: by $2,3,4,5,9,10$
- Review of metric system
- Word problems


## Blocks

## 1. Geometry

The geometry main lesson block in sixth grade is a continuation to the introduction to this subject given in fifth grade. Students are taught to use a compass and ruler to carefully construct various geometric forms. After experimenting with circles of various sizes and concentric circles, the sixdivision is explored, followed by twelve and twenty-four divisions. Polygons and stellar polygons are also introduced.

- Introduction to straight edge and compass
- Geometric constructions - line segment, angle, bisecting a line, bisecting an angle, constructing a perpendicular line, constructing an equilateral triangle and a square, and constructing a triangle, square, hexagon, and octagon inside a circle.
- Division of a circle to produce a dodecagon and 24-gon
- Geometric terms - point, line, line segment, plane, parallel and perpendicular lines, polygons, circles
- Angle measurement
- Introduction of protractors
- Perimeter and area of a rectangle and right triangle


## 2. Business Math

Building upon the review of decimals and percentages taking place in the supplemental review lessons, the sixth grade business math block is an introduction to the workings of the economic world. Students study business practice including earnings, accounting, taxation, borrowing, and the pricing of goods and services.

- Trading systems - bartering, work for work, currency
- Pricing of goods and services
- Double entry bookkeeping
- Percentages
- Formulas
- Discount, sale price, commission, simple interest, taxes

Sixth Grade Benchmarks for mathematics - 75\% of students should master by the end of sixth grade

- Adding, subtracting, multiplying, and dividing decimals and fractions
- Conversions among fractions, decimals, and percentages


## Grade 7

In seventh grade, students have a mathematics class four days a week and a geometry main lesson block. (Some teachers may choose to do a second math block to introduce Algebra.) The daily class is designed to provide regular practice and instruction to develop mathematical skills. Over the year topics include: review of basic processes with fractions and decimals, perimeter and area, rounding, estimating, prime numbers and prime factorization. New topics during this year include: order of operations, extension of number line to include the negative numbers and the coordinate plane, ratios and proportions, operations with signed numbers, reading, interpreting and making statistical graphs and measures of center.

## Suggested Division of Skills by Block

- Review of basic processes with fractions and decimals
- Review of geometry topics introduced in sixth grade
- Rounding
- Estimating
- Prime numbers and prime factorization
- Ratios and proportions
- Order of operations
- Extension of number line to include the negative numbers and the coordinate plane
- Operations with signed numbers
- Reading, interpreting, and making statistical graphs and measures of center


## Blocks

## 1. Geometry

In the seventh grade mathematics main lesson block on geometry, students build upon the skills developed in sixth grade and explore three kinds of triangles (equilateral, isosceles, and scalene), and three kinds of angles (square, acute and obtuse). They learn to inscribe a pentagon in a circle. They also study interior and exterior angles and their measures, logarithmic spirals and the Spiral of Archimedes, leaf forms inscribed in a circle and a triangle, Pi as a ratio of circumference to diameter, circumference and area of circles, area of squares and rectangles, and proofs.

- Area of non-right triangles and parallelograms
- Pi , as a ratio of circumference to diameter and the circumference and area of circles is derived
- Triangle constructions - SSS, SAS, and ASA
- Geometric constructions with inscribed polygons
- Acute, right, obtuse angles and the following relationships: vertical, complementary, supplementary
- Theorems arising from two parallel lines cut by a transversal
- Classifications of triangles by angles and side lengths
- Pythagorean Theorem
- Interior and exterior angles, logarithmic spirals, Spiral of Archimedes, Thales' proof
- (Leaf forms and Golden Ratio)


## 2. Algebra (teach before Winter Break)

- History of the development of algebraic thinking
- Algebraic notation
- Derivation of formulas
- Introduction to positive and negative numbers
- Simplifying expressions
- Solving equations
- Order of operations

Seventh grade benchmarks for mathematics $-75 \%$ of students should master by the end of seventh grade

- Ratios, proportions, and percentages
- Understand and use the concept of signed numbers


## Grade 8

In eighth grade students have mathematics class four days per week and one main lesson block course in mathematics. The course includes simplifying and working with variables and variable expressions, properties of exponents, order of operations, properties of real numbers, functions, evaluating expressions, the coordinate plane, graphing functions, solving equations, formulas, geometrical review, and factoring. In addition to these topics, some students may be ready for the additional challenge of the following topics: translating sentences into equations, use of number lines, solving additional functions, simplifying polynomials, factoring polynomials, simplifying radicals, and solving inequalities in one and two variables.

## Suggested Division of Skills by Block

- Simplifying and working with variables and variable expressions
- Properties of exponents
- Order of operations
- Properties of real numbers
- Functions
- Evaluating expressions
- The coordinate plane
- Graphing functions
- Solving equations
- Formulas
- Geometrical review
- Factoring

Some students may be ready for the additional challenges of:

- Translating sentences into equations
- Use of number lines
- Solving additional functions
- Simplifying and factoring polynomials
- Simplifying radicals
- Solving inequalities in one and two variables


## Block

## 1. Platonic Solids

The eighth grade mathematics main lesson block is focused on the geometry of platonic solids. The students examine the five regular solids starting with a study of the faces, edges and vertices. For each of the solids, student make detailed geometric drawings, nets to be cut and folded, and finally three-dimensional solid forms of the cube, octahedron, dodecahedron, icosahedron, and the tetrahedron.

- Study the properties of the five regular polyhedra, more commonly known as the Platonic Solids, by examining the relationships between the edges, vertices, and faces of each solid
- Mathematically calculate key attributes of the cube using the Pythagorean Theorem and an algorithm for finding square roots
- Introduce the concepts of tessellation and symmetry
- Prepare tessellated nets from a vesica piscis to construct paper models of the five Platonic solids
- Construct careful geometric drawings of each

Eighth grade benchmarks for mathematics $\mathbf{- 7 5 \%}$ of students should master by the end of eighth grade

- Managing the four operations with signed numbers, including rational numbers
- Fluency with algebraic expressions and equations


## Science Curriculum

## Grades 1 and 2

In the Early Childhood classes children spend a great deal of time playing outdoors, experiencing the changing seasons and coming to know their natural surroundings in a multi-sensory fashion. In Grades 1 and 2 more awareness is brought to the child's interaction with the natural world. Goals are to develop observation skills, awaken the senses through direct experience, and to cultivate wonder and appreciation.

- Classes take a walk and play in the woods every day, in all kinds of weather
- Students hear nature stories daily, many created from their outdoor encounters with leaves, trees and other plants, insects, animals, nests, shells, water, wind, etc. Other stories will give children glimpses into diverse biomes, in other cultures and other times. Native American nature myths are particularly relevant in our locale
- Possible activities:
- Draw and write in a nature journal

Maintain an interactive "nature table" in the classroom
Encourage "show and tell" items/experiences from nature
Berry picking
Pick mint and make tea
Collect leaves or dandelions to make crowns
Nature crafts
Count migrating geese
Observe hoar frost
Identify animal tracks
Learn names of common trees
Listen for different bird songs
Make bird feeders
Learn names of spring and fall flowers
Plant seeds and watch them grow
Observe water flow from rains
Collect milkweed and monarch eggs and watch them develop in the classroom
Look for frogs, toads and insects on the school grounds
Field trips, e.g., maple sugaring, petting farm, apple picking
Second graders plant seeds for their $3^{\text {rd }}$ grade Three Sisters Garden

## Grade 3

The Third Grade curriculum explores the many ways human beings interact with nature to make their home in the world. The local geography the children have come to know in an up close and personal way is now greatly expanded to include various climates and cultures throughout the world, and how people have adapted to their surroundings to obtain food, clothing and shelter. In Main Lesson blocks, on field trips, in project work and language arts, students will study the topics below.

- Third graders will learn about sowing, tending, harvesting and preparing food. The class will plan and prepare a "feast" for the annual school Thanksgiving Festival
- They will study farming in a special Main Lesson Block
- Various grains and fibers (cotton, wool, linen, etc.) will be studied
- A Shelters Block will explore how human beings build their homes in relation to their natural surroundings
- The work of craft and trades people will be presented with hands-on participation whenever possible. Examples: experiences with weavers, carpenters, blacksmiths, glassblowers, beekeepers, bakers, candle-makers, masons, etc.
- A special building project will give students experience in working with tools and natural materials to construct something useful for the community


## Grade 4

Two important Fourth Grade blocks are key in introducing a more specific, comparative and "thinking" approach to science.

- The Human and Animal Block takes its start from a careful look at the form and capabilities of human beings, then goes on to examine various animal forms in relation to our own. Through objective and factual descriptions, and phenomenological observations when possible, many different animals are studied, as are their habitats, form and function. Students often choose a particular animal to explore on their own in a special project.
- The Local Geography Block, (especially in Michigan!), offers an excellent place to explore the qualities of water and its importance in our lives. The Huron River Watershed is highlighted and mapped. Teachers strive to help students develop a relationship to this river that sustains us. Visiting the river, local dams and lakes can be part of this. A significant foundation for environmental studies in later grades can be laid here. Students will learn about:
- Water flow and drainage
- The water table
- Wetlands
- Damming rivers
- Water power, mills
- Maintaining clean water

In Michigan history studies students will learn how towns develop around rivers. Environmental science lessons are learned when the effects of logging and fur trading (especially beaver furs) are presented.

## Grade 5

In Fifth Grade, Botany is the main science focus. Below are sample descriptions of the two Botany Main Lesson blocks.

The block began with a closer look at flowers like the dandelion and the white snakeroot. There were discussions about the role played in plant life by the sun's light and warmth, the soil, water and air. Attention was given to the parts of a plant: roots, stems, leaves, flowers and fruits/seeds. We drew these and named the various parts of a flower (calyx, sepals, pistil, petals, stamens). We saw that some flowers are composite with disc or ray flowers. A journey from the equator to the poles or from the base of a mountain to its summit gave us a range of plant regions-tropics, temperate regions, tundra and frozen poles. We compared this to a single flower with its fragrant and colorful flower in the tropics, leaves and stem in the temperate region and roots in the drier and cooler tundra. A look at plants from the least to most developed was compared to the stages of child development and took us from the "infant" fungi (plants who rely on composting soil or other plants and don't produce proper roots, stems, leaves or seeds) to the "mature" flowering plants. Along the way we studied lichens, algae, moss, ferns, and conifers. Outdoor Education classes were a wonderful support to all we learned. Each student researched a kind of tree and wrote a report, made drawings and presented the report in class.

## Botany II: Flowers and Insects

The block began with a comparison of monocotyledons and dicotyledons through a careful look at tulips and the rose family. Plentiful spring blossoms offered a fine review of the parts of the flower discussed last fall, and with pollen so abundantly evident, there was a natural segue way into the insect world. Honey the Bee told her story and shared honeycomb on crackers. Ants and butterflies further displayed insect morphology (details of head, thorax and abdomen) and metamorphosis (egg, larva, pupa, adult).

## Supportive Possibilities

- Field trips: Matthaei Botanical Gardens, Fredrick Meijer Gardens, J. P. Hoffmaster State Park
- A journal can be kept to record some of the many observations students make during this block. Suggested drawings: various leaves, wild geraniums, conifers and deciduous trees, dandelions, insects, etc.
- Insects and plants are inseparable; the former should also be highlighted. Visiting a beekeeper recommended.
- In connection with the developing plant from seed to flower, one can weave in aspects of human reproduction and puberty during Health classes.
- Recommended: Read George Washington Carver's biography to class.
- Salad day with gardening teacher in the spring.
- Gardening classes


## Grade 6

Grades 6-12 have designated science Main Lesson blocks. In $6^{\text {th }}$ Grade these are Astronomy, Geology and Mineralogy, Physics and Environmental Studies. Below are descriptions of sample blocks.

## Astronomy (3-4 weeks)

This is a science block that will guide the children through a phenomenological experience of the workings of the celestial dome. Consequently, the children will discuss and learn about the heavens from a geo-centric perspective. (The Copernican Revolution and a heliocentric perspective as well as the work of Sophia and Tycho Brahe, Johannes Kepler, and Galileo will be brought in seventh grade.) They will make observations of the celestial dome - its shapes, limits, and properties. They will discuss the movements of the stars as experienced from the four directions, noting that stars rise in the east, set in the west, and both rise and set in the south and the north. They will observe that one star in the north does not move - Polaris. They will learn how to locate Polaris and the circumpolar asterisms and constellations. From there, they will look at the seasonal constellations learning astronomical names and myths from ancient Greece, and very likely those of the Ojibwe. (Here in the northland the Ojibwe names and legends connect us to the rhythms of nature.) They'll also study the movement of the sun - again from a geo-centric perspective. From our own observations here on earth, they'll follow the sun as it moves through the zodiac in the course of a year. They'll also learn about the moon - her phases, eclipses, and lunar cycle. Possible field trips: An overnight trip to a Dark Sky Park (or other place away from light pollution), and the planetarium at the University of Michigan Museum of Natural History.

## Geology and Mineralogy (3-4 weeks)

The block began with a look to the Grand Canyon and a review of the processes of weathering and erosion. We noted the layers so clearly visible in the canyon. We reviewed young and old mountain ranges from last year's geography studies and examined ways mountains are formed: folding, faulting and domes. Focusing then on igneous rock, we studied granite and its components of quartz, feldspar, mica and sometimes hornblende. We talked about crystal formation. Volcanoes made the concept of molten rock perfectly clear. We learned about craters, crater lakes, lava flow, and the earthquakes that occur in volcanic landscapes. Fault lines and plate tectonics were briefly described. Sedimentary rocks were the next chapter in our study, particularly sandstone, limestone, shale and coal. Students learned how limestone formed from enormous bone and shell deposits of ancient creatures, and how coal formed from extraordinarily rich plant life in a very distant past. Metamorphic rocks belonged to the third category studied: pressure, warming and, possibly, added mineral components change granite to gneiss, limestone to marble, sandstone to quartzite and shale to slate. Fossil formation, salt deposits, limestone caves, and mineral ores were additional topics. Rock samples were examined throughout the block. An overnight field trip to Hocking Hills, Ohio is an excellent complement to this study.

## Physics (4 weeks)

In the Physics block, students experience and observe phenomena related to sound, visual images, thermal changes, tribo-electric effects, and magnetism. Each new phenomenon was introduced with an experiment, followed by individual reflection, and then a group discussion. The discussion led to an articulation of what was perceived and learned. The experience precedes the concept as a
means to allow fresh and individual discovery. This "experience first" approach helps train the senses and develops observation skills - focus, attentiveness, and interest in phenomena, even the seemingly mundane. The students work to find lawful relationships and conditions based on their collective observations and experiences. Careful listening and openness are fostered as they grapple together to understand what was experienced and learned from each experiment. Careful language use supports this process, for example, instead of speaking of "heat transfer", we speak of warming and cooling. Instead of postulating, "Heat moves from hot to cold," we note that when something warmer and something colder are brought into close proximity, what is warmer cools, and what is colder warms--a dynamic relationship that changes over time.

The students learn to write up experiments with sequential, detailed, and factual descriptions and to articulate concepts clearly. Specific topics covered:

- Sound - sound perception through air and other substances, musical instruments, frequency, amplitude
- Optics - conditions for visual perception, how color is relational, opaqueness, translucence, transparency, illumination, darkness, after images, complementary colors, shadows
- Thermal Changes - warming and cooling, perception of warm and cold, convection currents, frostbite and hypothermia, change of state through warming or pressure
- Tribo-Electric Effects - conditions for tribo-electric effects
- Magnetism - lodestones, magnets, compared and contrasted with tribo-electric effects, introduction to magnetic fields


## Environmental Science (1-3 weeks)

Environmental science topics can be woven into related blocks such as Mineralogy and Physics. In our school, Environmental science, as a separate block, began in the 2015-2016 school year. One teacher piloted the Environmental Curriculum developed for the Detroit Waldorf School and devoted three weeks to this. The two subsequent class teachers crafted 1-2 week blocks; all made water a primary focus. This block is very much a work in progress. Below follows a list of topics that were covered.

- The water cycle
- The water table
- Storm drains, rain gardens; impact of building construction on school grounds
- Examining plumbing that serves our school building
- Water inventory to calculate personal water use
- Water flow, including vortices and vortex trains
- Role of water in formation of caves and caverns
- Erosion
- Trip to Ann Arbor's water treatment plant
- Water use in daily life, its quality and conservation
- Contrast between stewardship of the Aral Sea in Central Asia and Great Bear Lake in the Arctic Circle
- The Colorado River, its importance to the southwest US—irrigation, drinking water, transformation of an arid environment to one that supports millions of lives, the impact of human use (dams, redirection, etc.)
- Biodiversity
- Food webs
- Flora and fauna of different Michigan ecosystems
- Roles of producers, consumers and decomposers
- Transportation and energy related to food (costs and benefits of local food and outsourced food; energy needed to process food; food waste; composting; recycling; waste reduction)


## Grade 7

Science blocks in seventh grade are Physics, Chemistry, Physiology and Environmental Science.
Physics (3-4 weeks)

- Thermal Physics: Experiments in thermal physics explore how liquids, gases, and solids behave when warmed and cooled. Insulators and conductors are introduced. The students learn about the history of the thermometer, the Fahrenheit and Celsius scale and conversions, the story of the Challenger disaster, hot air balloons and the first hot air balloon flight, thermostats, properties of metals, canning, and thermoses.
- Optics: Experiments in optics explore the phenomena of reflected images, which provides the foundation for learning about the history of mirror making, the camera obscura, and the invention of photography.
- Electricity: During the study of electrical phenomena, the students enjoy stories about early electrical experiments with chickens, flying children, electrified kisses, Leyden jars, and frogs' legs. The students also learn about the invention of the light bulb and the battery.
- Mechanics: During Mechanics, they explore and learn about leverage, the Law of Rotational Balance, torque, and different types of levers and simple machines.


## Chemistry (3 weeks)

- Combustion: The Chemistry block begins by exploring phenomena related to fire. The circulation of air and production of a type of spent air (later learned to be carbon dioxide) is a key topic in part of the block. Students travel to the high school lab to perform experiments in making and testing carbon dioxide and oxygen.
- Acids and Bases: For the next part of the block, students experiment with what takes place when marble is cooked in a kiln and chemically transformed into quicklime. They witness the exciting reaction when quicklime is mixed with water, resulting in a great amount of hissing, boiling, and steaming. When mixed with sand, this slaked lime turns into mortar. Homemade mortar may be used to create a small stone house. The "lime cycle" that is demonstrated through these experiments will become the basis for learning about chemical equations when the students are older.

The Physiology block covers circulation, respiration, digestion, and reproduction. Through experiments, observations, and conversations the students learn about the functioning of the heart and the role of veins and arteries in circulation. Focus on the digestive system allows the students to follow the voyage of food from the plate all the way through the alimentary canal. In lessons on the respiratory system students learn how human beings get oxygen out of the air and into the cells and how carbon dioxide is taken from the cells and removed from the body. Prior chemistry lessons weave beautifully into the discussions about respiration. Human reproduction details the male and female reproductive systems. Several days are spent speaking with the students about puberty, sexuality, sexual intercourse, gestation, and birth. These discussions happen in the full class and in sessions where boys and girls are in separate groups.

Environmental Science (See notes in Grade 6, above.)
Possible Grade 8 Topics:

- Importance of forests and forest conservation
- Wangari Maathai's story of the founding of the Green Belt Movement in Kenya to illustrate the consequences of unchecked commercial farming and how one woman's efforts led to return of health to the land
- Critical interdependence of living systems illustrated in the reintroduction of wolves into Yellowstone Park.
- Lasting conservation efforts that were begun centuries ago in Iceland and Japan
- Plastics pollution
- Boyan Slat's optimistic solution to collect plastics from ocean
- Mr. Trash Wheel machine in Baltimore Harbor
- Zero-Waste projects


## Grade 8

The Grade 8 science blocks are Meteorology, Chemistry, Physics, Anatomy and Environmental Science.

## Meteorology (2-3 weeks)

Topics covered:

- Daily weather observation
- Review of water cycle
- How clouds are formed
- Types of clouds
- Dew, frost, fog
- Convection
- Land and lake breezes
- Global wind patterns
- Fronts
- Hurricanes and tornadoes
- Greenhouse effect


## Physics (3 weeks)

Topics covered:

- Heat/Convection
- Sound: Doppler Effect, Speed of Sound
- Fluid Pressure/Hydraulics/Archimedes Principle
- Air Pressure
- Optics/Refraction/Boundary Colors
- Electricity/Electromagnets/Electric Motor

The students view experimental demonstrations each day and finish the block by assembling small electric motors.

## Chemistry (3 weeks)

This block deals with the chemistry of the food substances we eat: carbohydrates, oils, and proteins. Experiments with sugar, starch, cellulose, oil and protein show the students the nature of the foods that nourish us. The students observe and report on 15 demonstrations. Introduced in this block is the idea of a chemical test, and specifically the tests for simple sugar (Fehling's test), starch (iodine test), oil (Sudan III test), and protein (Biuret reagent test). Students work in the high school chemistry lab for 3 days conducting chemical tests to determine more about the nature of the foods they eat and substances they often use. They master the use of the Bunsen burner, learn to handle chemicals, and gain experience with safely using glassware. Requirements for the block include participating in class without disruption; completing a Main Lesson book with original experiment reports and drawings; learning vocabulary words related to the topics studied; observing the demonstrations carefully; and carefully completing the student labs. A final exam is given the last day of the block.

## Anatomy (3 weeks)

Topics covered:

- Bone structure
- The axial and appendicular skeleton
- Mechanics of skeletal movement
- Bones of the skull
- The vertebrae and vertebral column
- Muscles: voluntary, involuntary and cardiac
- How muscles work
- Bone and muscle health

Environmental Studies (See note in Grade 6, above.)
Possible Grade 8 topics:

- Transportation and Energy: Bicycles, trains, cars, and centralized power
- Agriculture from small farms to agribusiness
- The Dust Bowl story
- Contrast Native American attitude toward the earth with a commercial, industrial attitude that treats earth like a depository of resources.
- The Industrial Revolution: explore mining resources (e.g., coal and oil) and the consequences for humans, animals, and the land.
- Air quality
- Industrial pollutants in manufacture of clothing and other consumer items
- Factory farming
- Plastics


## Social Studies Curriculum

The study of human cultures and history includes movement, song, verse, dramatic presentations, legend, art in addition to the recorded events which have influenced the development of any group of people. Both the world language teachers, and the class teacher bring social studies experiences to the students in all grades. We are exploring ways to incorporate a global focus in social and cultural matters, geography, environmental science and historical perspectives. The geographic evolution of a people and their influence on place and a region's influence on people should be contemplated at all developmental stages, grades 1-8. Bringing a broad, global scope to all lessons, linking natural resources, energy needs, environmental concerns and economic realities to the social studies curriculum, will keep it relevant and inspiring. Integrating subject matter, finding links and using resources from many different areas when preparing for teaching will enable this relevance to remain alive.

## Grade 1

Theme: Imagination, Surreal Experiences, Tales of Wonder, Awe and Magic

- Stories with a dreamlike or fairy tale quality from around the world, western and non-western. (Challenge traditional gender and racial stereotypes in choosing stories).
- Archetypical stories. Ex. Aboriginal stories, Grimm's tales, African folktales, African-American tales, South and Central American stories etc.
- Songs and movement from different cultures ex. dance, drumming, rhythm sticks, and handclapping games.
- Celebrations of classroom community - interactions with other classrooms/community
- Activities: food, celebrations to honor different cultural experiences, especially in reference to individuals in the class.


## Grade 2

Stories of people who rise above it all

- Stories with a transcendent magical mood about selfless human beings, of brave, strong, loving individuals or communities. Ex. Saint Francis, Ruby Bridges, Saint Lucia, Saint Martin, and Martin Luther King Jr., Martin de Porres, Wangari Maathai, Helen Keller, Sequoyah, Louis Braille, Saint Patrick, Saint Zita, Saint George, Saint Jerome, Saint Elizabeth, Saint Christopher, Mother Teresa, Nelson Mandela, Jim Abbot. Include modern day heroes from around the world.
- Fables from around the world
- Native American legends and ways of life
- Trickster tales Ex. Anansi, Brer Rabbit
- Nature studies
- Festivals - Santa Lucia
- Activities - songs and movement from different cultures


## Grade 3

Becoming at home on the earth through work and survival

- Stories from the Hebrew Scriptures, Hebrew language exploration, songs, festivals and verse.
- African-American spirituals with themes connected to the Hebrew stories
- Farming ex. Planting, harvesting, preparing a feast
- Stories about how people grow crops in different parts of the world
- Can be connected to studying the grains and related to the health curriculum
- Trades Ex. blacksmiths, carpenters, millers, masons
- Shelters throughout the world: relationship of the human being to the environment ex. Indigenous shelters
- Pilgrimages
- Activities - Field trips to places where children can experience farming in the fall and spring as well as traditional farming methods. A building project to create a permanent structure that benefits the school or the community, driven predominantly by the children.


## Grade 4

First steps of exploration, outside our front doors, school doors, immediate community

- Local history
- With attention to houses used during the Underground Railroad and historic AfricanAmerican neighbors
- Optional - Make connection/s with others in the area
- Local and state geography
- Map-making
- Students begin from their own experience and work their way out to the state of Michigan
- Students learn about the four cardinal directions
- Study of local Native American tribes
- Explore the contrasting types of life
- Norse Stories
- Stories from the Kalevala, South America, Central America
- Inca, Aztec, Maya
- Tall Tales
- Ex. Davy Crockett, Paul Bunyan
- The study of animals from different parts of the world
- Activities:
- Optional Animal Report Fair
- Possible field trips: maple sugaring, Ann Arbor walk, Fort Michilimackinac, Bell Tower to see the landscape below, visiting local waterways (ex. drawing the Huron River), Sleeping Bear Dunes


## Grade 5

Exploration broadens and deepens - foundations of recorded history, geography

- Ancient China, India, Persia, Mesopotamia, Egypt, and Greece
- Comparing Ancient China and Ancient Greece
- Introducing major religions and philosophies of these cultures, include
- Buddhism, Hinduism, Confucianism, and Taoism
- Aztec and Mayan civilization - Introduction or continuation.
- Geography of North America
- Including the United States, Canada, and Mexico and surrounding islands
- Regions of North America
- Comparisons between states and between regions
- Incorporate songs from different places, including spirituals and Caribbean music
- States and capitals of the United States
- Teachers are encouraged to include reports or presentations about states or regions of North America
- Connection between geography economics and environment - link with science/environmental curriculum.
- What types of crops are grown in different regions of the continent
- An introduction to North American History and United States Civics
- Settlers on the continent
- Basic ideas of the United States government
- Division of power between the executive, legislative, and judicial branches
- The representation of states in Congress
- Ancient languages and writing
- Hieroglyphics, Cuneiform, Ancient Greek
- Festivals:
- Diwali
- Chinese New Year
- Activities
- Field trips: relating to ancient civilizations, cultural traditions
- Learning regional folk songs
- Hosting the Pentathlon
- Possible service to communities, local or global
- Possible learning the pledge of allegiance


## Grade 6

Exploration of recorded history \& Geography
Required topics: two-thirds of the curriculum

- Ancient Rome
- Founding mythology
- One of the seven kings
- Two later emperors
- Engineering: roads, sewer systems, bath houses
- Law and language
- Spread of Christianity
- Fall of Rome
- Middle Ages
- Three-fold culture: clergy, nobility, serfs
- Christianity, Islam, and Judaism in the medieval world
- The Islamic Empire
- A non-European medieval culture
- Geography of Europe, Africa, Asia, and South America continued (all continents touched on by the end of Grade 8).
- Suggested topics: one-third of the curriculum
- T'ang Dynasty China and Empress Wu
- Marco Polo, Kubla Khan
- Silk Trade
- Mongol Empire: Genghis Khan
- Journey of Ibn-Battuta
- Medieval calligraphy


## Grade 7

Recorded History \& Geography

Required:

- The transition from the Middle Ages to the Renaissance
- Italian Renaissance (Artists, biographies, banking, etc.)
- Astronomers
- Explorers and the meeting of different cultures
- Elizabethan Renaissance and Queen Elizabeth
- Harlem Renaissance
- Protestant Reformation
- Geography of Europe, Africa, Asia, and South America continued (all continents touched on by the end of Grade 8).

Suggestions:

- Reports and/or presentations on: An explorer, A Native American tribe, A commodity, or other such topic.
- Activities
- Italic Calligraphy
- Perspective drawing
- Portrait painting
- Holding a marketplace or a store
- Field trip to an art museum with a sketching assignment


## Grade 8

Recorded History and/or Geography of all Continents Completed - focus is broad
Required:

- American War of Independence
- Civil War
- United States Constitution
- The transition from farms to factories
- Geography of Europe and either Africa, Asia, or South America (all covered by the end of Grade

8) 

- Biographies of American men and women from different ethnic and religious backgrounds
- Current events

Suggested:

- People in early America: Native Americans, Founding Fathers, early settlers, women, immigrants, African-Americans
- Industrialization
- Technology
- Environment
- Conflicts
- The United States as a world power
- Independence movements world-wide
- Refugees - connect to science/environmental curriculum
- Women and feminism
- The oceans social-political issues - connect to science/environmental curriculum
- History of Detroit (Development of auto and air industries after bicycle block)
- World War I, World War II, Vietnam
- The Steel Industry
- Innovations such as elevators, skyscrapers and the Brooklyn Bridge
- The Great Depression
- The Cold War
- 20th and 21st century conflicts
- Development of film
- Individual Projects
- Internships with service organizations in the area

Suggested Middle School Resources:
Biographies: Andrew Carnegie, John Muir (naturalist), Gail Halvorsen (the "Candy Bomber"), Nicholas Winton (humanitarian) and Zainab Al-Suwaij (cofounder, American Islamic Congress)

Films: "The Power of Good"
Possible Books for reference:

Ambrose, Stephen E. Undaunted Courage: Meriwether Lewis, Thomas Jefferson and the Opening of the American West

Armstrong, Karen. Muhammad: A Prophet for Our Time
Coerr, Eleanor. Sadako and the Thousand Paper Cranes
Diamond, Jared. Guns, Germs and Steel.
Mann, Charles G. 1491 New Revelations of the Americas Before Columbus
Takaki, Ronald. A Different Mirror, A History of Multicultural America
Wilkerson, Isabel. The Warmth of Other Suns The Epic Story of America's Great Migration Out of the Dust, Cat Running, Soft Rain, Only the Names Remain, The Navajo Long Walk, Winter Count by D. Chief Eagle

## Cyber Civics Curriculum

## Revised 2019

In today's world, children encounter an unimaginable wealth of technological opportunity. While there are ample opportunities to passively consume the products of technology, we want our students to stand in the world as active creators, able to direct technology rather than being ruled by it and to use technology's power to create changes that matter in the world. Cyber Civics is taught once per week to $6-8$ grades for an 8 week block. In the course, students will learn a practical overview of computers, the internet and modern communication. Through technological demonstrations, guided discussion and hands on activities, children will learn about skills and concepts that power modern technology. They'll learn how to skillfully navigate this complex landscape intelligently, with respect and restraint.

## Grade 6

This year, students will be introduced to computers, what they are. Students will be introduced to the history of computers, how a computer works, and what computers can do. Through demos, they'll be given practical skills for how to interact with computers: Identify types of programs, access settings, navigate and publish or communicate over the internet, and create or consume content.

## Grade 7

Students will learn digital communication skills, and how to safely navigate the internet. We'll go in depth into social media, what it is, how it works, and best practices when using social media. Topics will include: online identity, communication mechanisms, the lifetime of online data, and strategies to avoid and de-escalate conflict online. They'll learn about different platforms and types of communication and practice their online communication skills through publishing content online.

## Grade 8

This year, students will be taught skills to become technologically empowered innovators and leaders. Activities and lessons will include: programming basics, online privacy and security, hacking and being safe. They'll be introduced to emerging technologies, and participate in thought activities that will them to view computers as a malleable technology that can be manipulated for many purposes and to reshape our future and what we are.

## Art and Modeling Curriculum

Revised 2019
Art permeates life in a Waldorf school. Students use art to penetrate the academic curriculum, to enhance their main lesson books, to express themselves in their subject classes, and to deepen their relationships with each other. As students move from first to twelfth grade, their technical skills naturally improve and expand and the art lessons shift from being brought by their class teachers, to art teachers who specialize in teaching art, to actual artists in some of the High School blocks. Throughout this progress, students are working to develop their own artistic sensibilities, master technical skills, and learn to trust themselves to express their feelings and thoughts artistically. Demonstration times are exceedingly valuable during every art class. Dr. Steiner wrote, in a lecture of 1923:
"I have made drawings before your eyes that arose wholly out of each moment. You could see what I meant by every stroke. You could think along with me without any mediation. This is another thing to be included in teaching of children today. As far as possible avoid finished drawings. As much as possible allow the children to see the drawing proceeding from the moment - allow them to see each stroke as it is born. In this way, the child becomes inwardly involved in the work and we encourage them to become inwardly active... What matters is to lead the children to independence."

In all art classes, from first to twelfth grade, high-quality materials, brushes and pigments are used, and there is an intentional quiet organization brought to the activity. This develops a respect and focus for artistic work that allows students to quietly enter into an imaginative, thoughtful mood and express themselves through the media.

## Grade 1

- Art lessons integrated throughout the first grade curriculum by class teacher
- Letters introduced through drawings. Students then emulate and draw them in their main lesson books.
- Students paint weekly and experience the expansive effects of applying watercolors to wet paper.
- Colors are introduced through simple stories that bring feeling and life to the various colors
- Encourage the students to explore what happens when the basic colors meet.
- The stories often deepen and extend the morning main lesson subject
- Beeswax modeling brought by the class teacher
- Warming wax in the hand and then quietly forming it into the shapes develops focus and fine motor skills.
- Each lesson is started with a story rich in description
- The students are guided through the modeling of a central character or figure of the story. This continues the development of their listening and thinking skills.
- Form drawing - See Form Drawing Curriculum


## Grade 2

- Expand upon the exercises encountered in first grade lessons
- Students continue to work with their class teacher and develop their artistic skills in their main lesson books.
- Watercolor painting lessons are furthered
- The students slowly being guided into more and more formed shapes in their painting.
- Themes to the lessons, such as a seasonal topic, or one drawn from the main lesson subject of the day, become more sophisticated.
- Beeswax modeling continues
- students often work cooperatively to create the elements of a story
- Each models different characters rather than all working on the same model as in first grade.
- Form drawing - See Form Drawing Curriculum


## Grade 3

- Last year in which all of the art lessons are brought by the class teacher
- In the main lesson classes, the students take up painting the story of the seven days of Creation from the Bible, experiencing the power of color and form that brings new life to the stories they hear.
- Watercolor painting continues
- Students learning to gain more control the flow of the paint
- Master the shaping of intentional forms despite the watery media
- Beeswax modeling continues, especially as a way to add life to the stories of the Hebrew people.
- Form Drawing - See Form Drawing Curriculum


## Grade 4

- Art lessons are now in the art room with specialist art teacher.
- Demonstration time allows students to observe their art teacher at work - creating imagery, making suggestions for their work, perhaps making small errors! This is a highly valuable time of observation, inspiration and questioning for the children.
- In their art classes, students are supported in gaining control of the paint and mastering form within the painting.
- Oil pastels are introduced
- Students learn how to blend them to create a complexity of hues
- Students begin work with clay.
- They work on modeling
- Progress to small ceramic vessels and forms, which are then glazed and fired.
- Form Drawing - See Form Drawing Curriculum


## Grade 5

- Art classes are tied to the main lesson exploration such as botany and ancient cultures.
- Demonstration (see above)
- Suggested topics for painting, drawing and modeling clay:
- Asian elephants, mushrooms, water lilies, and Greek vase designs.
- Clay work includes modeling and relief work.
- A variety of media are used for drawing including charcoal, tempera paints, oil pastels, and colored pencils.
- Backdrop painting for the class play may take place.


## Grade 6

- Demonstration (see Grade 4)
- Continue to expand students' familiarity with watercolor painting.
- Black and white drawing, soft pastels, and observational drawing are introduced.
- Students refine their skills and develop more fluid line work when using either pencils or paint brushes.
- Students practice blending colors and graduating shades for effects of light.
- They use contrast for heightened drama and mood and basic elements of perspective for a sense of depth.
- Students also model clay to sensitize touch and to strengthen the will.
- Backdrop design and painting for the class play takes place.


## Grade 7

- Demonstration (see Grade 4)
- Students are called to depict their various relationships to the world.
- They honor the festivals and seasons with paintings and drawings.
- Students discover how to create a point of view with the vanishing points of perspective drawing.
- They explore their affinity for one another while working cooperatively to design and paint the sets for their class play.
- The year culminates with each student re-creating a Renaissance portrait. They individually choose a Renaissance master's work and complete the work with colored chalks and pencils.
- Backdrop design and painting for the class play takes place.


## Grade 8

- Demonstration (see Grade 4)
- Expands on the students' main lesson studies
- Subjects include American history, solid geometry, anatomy and the class play.
- Enhances student awareness of the countless choices they encounter when making art: whether to design from observed or referenced materials, from their own imagination, or from a combination of both.
- Backdrop design and painting for the class play takes place.


## Form Drawing Curriculum

Grade 1 (First Main Lesson block, 2 weeks - afterward 1 lesson per week)

- Straight line exercises
- Curved line exercises
- Combined straight and curved line exercises
- Forms suggesting activity, movement, gesture (e.g., falling leaf)
- Exercises with straight or curved lines on either side of a vertical line
- Straight and/or curved ribbon designs
- Transforming straight line forms to their corresponding curved line forms and vice versa
- Forward and backward moving forms
- Repeated straight lines and repeated curved lines and forms which make an invisible line
- Freehand circles
- Spirals (inward, outward, circular, triangular, square, ribbon designs)
- Lemniscates

Sources:
Kutzli, Rudolf. Creative Form Drawing, Workbook 1, 1985.
Niederhauser, Hans and Frohlich, Margaret. Form Drawing, 1974.
Schubert, Ernst. Geometry Lessons in the Waldorf School Volume 2: Freehand Form Drawing and Basic Geometric Construction in Grades 4 and 5.

Grade 2 (once per week)

- Continue first grade work with increasing challenge
- Transform combined straight/curved line forms to their opposites
- Exercises with 2 or more lines to the left and right of a vertical
- Symmetry exercises - left/right and above/below; with drawn or imagined axis
- Band designs

Sources:
Kutzli, Rudolf. Creative Form Drawing, Workbook 1, 1985.
Niederhauser, Hans and Frohlich, Margaret. Form Drawing, 1974.
Schubert, Ernst. Geometry Lessons in the Waldorf School Volume 2: Freehand Form Drawing and Basic Geometric Construction in Grades 4 and 5.

Grade 3 (once per week)

- Continue work of previous grades, increasing challenge
- Create a new alphabet using transformation principles
- Inner and outer (e.g., working from edge toward center with hatch lines or shading, create a circular space at page center; working from center of page toward periphery, create a circle using hatch lines or shading-squares, triangles, etc. can also be drawn)
- Patterns with central symmetry (e.g., pinwheel), revolving or based on various number patterns
- Growing forms (begin at center, creatively add symmetrical design as one works toward periphery)
- Forms that metamorphose
- Students should now be able to cross axis of symmetry with ease.


## Sources:

Kutzli, Rudolf. Creative Form Drawing, Workbook 1, 1985.
Niederhauser, Hans and Frohlich, Margaret. Form Drawing, 1974.
Schubert, Ernst. Geometry Lessons in the Waldorf School Volume 2: Freehand Form Drawing and Basic Geometric Construction in Grades 4 and 5.

## Grade 4

- Braided and woven forms
- Forms which illustrate fractions
- Stress observation and precision


## Sources:

Kutzli, Rudolf. Creative Form Drawing, Workbook 1, 1985.
Niederhauser, Hans and Frohlich, Margaret. Form Drawing, 1974.
Schubert, Ernst. Geometry Lessons in the Waldorf School Volume 2: Freehand Form Drawing and Basic Geometric Construction in Grades 4 and 5.

Grade 5 (Some teachers offer freehand geometry as a block.)

- Freehand geometric drawings (begin with circle, space points on circumference, create nesting triangles, squares, stellar forms)
- Families of circles joined at one point
- Series of triangles sharing single base
- Geometry in nature (e.g., seed arrangement in pistils)
- Complex metamorphoses
- Multiple symmetries
- Circular symmetries (inversion exercises)

Sources:
Kutzli, Rudolf. Creative Form Drawing, Workbook 1, 1985.
Niederhauser, Hans and Frohlich, Margaret. Form Drawing, 1974.
Schubert, Ernst. Geometry Lessons in the Waldorf School Volume 2: Freehand Form Drawing and Basic Geometric Construction in Grades 4 and 5.

## Handwork Curriculum

Handwork provides a way to develop physical and intellectual capacities. For example, knitting develops coordination, sharpens fine motor skills, and increases visual acuity. Simultaneously, it asks a child to sequence steps, to develop focus and concentration, and to practice basic mathematical processes while counting stitches and rows. As students progress through the grades, they take on more complex and challenging projects, in a consciously chosen developmental progression, while continuing to expand their skills.

Development of the will is an important part of the handwork curriculum as students are asked to complete detailed and complex projects that take concentration and perseverance to finish. Through this work, they develop a confidence in their own capacity to complete a challenging task and to reap the rewards of the beauty that can be created by their own hands.

Finally, the education of the student's esthetic sense is strengthened through the handwork curriculum. Students learn to balance and harmonize colors and to work with a variety of materials, with the goal of creating artistically beautiful work.

## Grade 1:

- Students hear a story of sheep's wool being gathered and spun into yarn. Each child has an opportunity to hand spin a bit of raw wool.
- Students then learn slip knots, finger knitting, and finger weaving.
- Using bulky yarn and size \#10 knitting needles, the children then learn to cast on, knit, count rows, change colors, increase, decrease, cast off, sew, and identify mistakes made in their work.
- Projects include bookmarks, butterflies, gem pouches, rainbow balls, kittens, cotton cloths and scarves.


## Grade 2

- Students continue to knit but with thinner size \#6 knitting needles and worsted weight yarn.
- The purl stitch, knitting a simple pattern in the pocket doll's sweater, and correcting errors independently are introduced as the student's fine motor skills are further developed. The will and clarity of thought are also strengthened as students create more complex projects.
- Projects include pixie dolls, lambs, pocket dolls, and other small projects.


## Grade 3

- Students learn to crochet the chain, single, double, treble, and shell stitches.
- Crochet projects include baskets, hats, balls, cotton clothes, "granny" squares and bookmarks.
- Flat wet felting, felting round beads, carding and spinning wool on a small twig spindle, plant dyeing yarn and fabric and weaving on a small board loom is introduced.


## Grade 4

- Students predominantly cross-stitch in fourth grade. Beginning with a 2-way mirror design drawn on graph paper and transferred onto 6-count Aida cloth, progressing to a 4-way then 8way mirror design. The finished cross-stitch designs are sewn onto a fabric backing and stuffed with wool and potpourri. Each student chooses their favorite colors using size \#3 pearle cotton thread.
- Students also learn fine hand-sewing and embroidery.


## Grade 5

- Students who have previous knitting experience knit socks on four 6" size \#10 double-pointed knitting needles. Students who have no knitting experience knit slippers on two 14 " size \#10 single- pointed knitting needles. All students use superwash bulky yarn.
- The history of knitting and the presentation of sock patterns around the world is introduced as well as different types of yarn and knitting needles used. Students are also given instructions for washing and darning wool garments.
- After a sample of knitting, purling and rib stitch is completed, each step of the intricate sock pattern is orally introduced as the first sock is knitted. Students follow a written pattern to knit the second sock with increased independence.
- This project's precise mathematical progression requires quiet focus as active will and intellect are strengthened.


## Grade 6

- The handwork project chosen for grade six is a doll.
- This project requires the development of many skills including a higher level of accurate cutting of fabric, basting, backstitching, stuffing, and assembly.


## Grade 7

- Students hand-sew pajama pants using flannel fabric and a store-bought pattern with an instruction sheet they learn to read and follow.
- They use stitches they learned in fourth grade and polished in sixth grade: basting, whip, and backstitches, as well as tailors knots and tacks and hem stitching.
- Pressing techniques, used in the construction of garments, are introduced as is clothing care and basic garment repair.


## Grade 8

- Eighth graders sew a shirt on a sewing machine with interfacing in the collar and cuffs.
- The fabric chosen is woven white cotton.
- The sewing machine and its manual are introduced in the first lesson, as is the project.
- Students learn to thread the machine and adjust the dials to make a variety of stitches.
- After practicing sewing on a scrap fabric, using a store-bought pattern, students prepare their fabric and pattern pieces and pin, cut out and assemble their shirts. Pressing, ironing and clothing care are introduced. Each class begins with a brief presentation such as "zero waste" or "fast fashion" and sewing tools, such as pinking shears, are introduced.
- The eighth graders learn to access the sewing machine manual, with its schematic diagrams, to sew and to repair their machines when necessary and to work with increased accuracy and attention to detail. The value of developing executive function is apparent when a mistake needs to be corrected. Textile pollution, unjust labor practices and their opportunity to make a positive impact in the world are brought to their attention.


## Movement Curriculum

Edited 2019 (RJW)
Physical education, or movement as it is known at the Rudolf Steiner School of Ann Arbor, is an essential part of a fully balanced, healthy curriculum. Students at each stage of development need to fully explore the strengths and capacities of their physical bodies -- learning new skills, developing physical confidence and honing their senses of balance, rhythm and self-control. Games, at first cooperative and later competitive, allow students to learn to work in a "team" environment and develop their evolving social skills.

Class teachers and special subject teachers use movement in their classrooms to help enliven and enrich academic instruction. In addition, students have two additional periods dedicated to movement. At least one of these periods is a physical education (gym) class taught by the movement teacher; the other may be an additional gym class or a Eurythmy class taught by a trained eurythmist. Eurythmy is purposeful, rhythmic movement coordinated with speech or music.

## Curriculum for Movement and Games classes

## Grades 1 and 2

- Focus is on cooperative game playing, learning to work in a "team" environment.
- Games have the gesture of the circle, bringing form to students' movement and keeping them as part of the whole. Games often have a story element to them.
- Classes have a rhythmic quality to them, with students experiencing both an "out" breath of vigorous activity and an "in" breath of quiet focus.
- Games and activities are chosen to help students develop: large (gross) motor skills and fine motor skills; a sense of body geography and spatial awareness (proprioception); balance; understanding of left/right; ease in crossing both midlines; hand-eye coordination, and the ability to imitate and anticipate (the capacity to observe before acting).
- Large active running and movement games encourage the development of physical control and confidence.
- By Grade 2, students particularly enjoy games with an element of "danger" or chasing.


## Grade 3

- Games are still cooperative in nature, but the types of games introduced in Grades 1 and 2 are developed further and become more complicated and precise. Students move from the gesture of the circle to more individuality in their movements.
- The Grade 3 curriculum brings new challenges to students who are increasingly confident and physically capable.
- Students should master basic movements, including the left/right spatial plane and midline crossings. Throwing and aiming skills should be emphasized.
- Tumbling and gymnastics are introduced, if they have not been brought earlier.
- Jumping rope should continue throughout the grades.
- Games in which groups cooperate to compete against other groups are introduced, as a precursor to sports. These may include kickball (as a skill builder for baseball) and fireball (for volleyball).


## Grade 4

- Cooperative games are balanced with exercises and activities designed to strengthen and develop specific physical skills, as a foundation for team sports.
- Continuation of work from Grade 3 with aiming, precision, and individual achievement.


## Grade 5

- While students do compete against each other, emphasis should also be placed on individual improvement and effort, and in each child striving to create graceful and beautiful movements.
- The study of ancient cultures culminates in the Pentathlon, hosted by RSSAA for the regional Waldorf schools. This event, featuring five classic Greek games (short run, long run, long jump, discus, and wrestling) is an introduction to formal judgment of the individual. Students are acknowledged for their achievements in beauty (proper form), grace, and truth (who ran the fastest, jumped the farthest, etc).
- The movement teacher works with the class teacher to train the students for the Pentathlon. This may include extra periods dedicated to learning and practicing skills tested at the event. This begins the shift from "playing" to a more "athletic" mood for the movement classes.
- This is last year in which the majority of activities will have a basis in story.
- Large group activities such as Capture the Flag, Spaceball and Double Dutch (jumping rope) are appropriate.
- Team sports with concrete rules, and skill drills, are formally introduced.
- Most of RSSAA's after-school team sports teams (basketball, volleyball, track and field) are available to Grade 5 students.


## Grade 6

- Curriculum responds to the maturing physical bodies of Grade 6 students, who are often growing rapidly. (This growth often leads to clumsiness in some students and to greater individual diversity of physique among the class than at any other previous age.)
- Activities that encourage uprightness and inner balancing of forces are the focus.
- Continuation of team sports; a separate emphasis on physical fitness drills can begin this year.
- Students participate in the Medieval Games at the Cincinnati Waldorf School in the spring; the class should practice archery in preparation for this event.
- Grade 6 students can participate in all after-school sports (soccer, basketball, volleyball, track and field)
- Ballroom dancing, which encourages both graceful movement and respectful social interaction, becomes part of the curriculum this year, taught by an outside instructor.


## Grade 7 and 8

- Students in Grades 7 and 8, aware of their changing bodies, are ready for a more intense focus on physical fitness, including muscle building and flexibility.
- Team sports are a regular part of the classes. Students should develop all necessary skills to be able to play sports at the High School level, if they so choose.
- Grade 7 and 8 students can participate in all after-school sports. Ballroom dancing remains part of the curriculum.


## Eurythmy Curriculum

## Revised 2019

Eurythmy, developed by Rudolf Steiner, is an art of human movement set to music and artistic speech (poetry). It is sometimes called "speech and music made visible" and is intended to be a complement to intellectual learning. By studying Eurythmy, students learn dexterity of movement, grace, poise, balance, and concentration. They also develop a sense for sound and space and a feeling for social harmony.

## Grade 1

In Grade 1, fairy tales are the theme. Gestures are set to the images arising from the stories and are accompanied by music. The children practice left/right orientation, trace geometrical patterns on the floor, and step and clap opposing rhythms.

## Grade 2

In Grade 2, legends and fables are the inspiration for movement. Gestures for different sounds are added to the movement vocabulary of Eurythmy, and the children begin to do simple coordination exercises using copper rods.

## Grade 3

In Grade 3, contraction and expansion exercises focus on breathing. Children learn to listen for major and minor tonalities and begin to do concentration exercises that involve clapping and stepping different numerical patterns.

## Grade 4

With growing self-awareness brought on by the nine year change, children in Grade 4 have a new relationship to space. Spatial forms are now moved with a frontal orientation, which brings a greater awareness to the different directions in space. Movement forms with crossings (as in figure eights) are also a theme. The children develop a new relationship to speech and language, strengthened by practicing forms in space related to the grammatical elements of language and by working with the strong alliterative poems, connected to the Norse Myths. In tone eurythmy the children learn gestures for the tones of the C-scale and apply these to simple melodies. Group exercises for the cultivation of a harmonious social life continue as well as concentration and rod exercises, which become more complicated.

## Grade 5

We try to capture the mood and create an experience of the ancient civilizations studied in the Grade 5 Main Lesson curriculum. In conjunction with the study of Ancient Greece, the children move archetypal rhythmic patterns with an emphasis on the hexameter. In tone Eurythmy the students
experience the difference between sharp and flat tones and learn to express this through gesture. Grade 5 is often considered the "golden age of childhood." Here the child is closest to experiencing a harmonious relationship between the inner self and the outer world. At this time the children learn a movement form called "the Harmonious Eight," which helps to cultivate this balance. The work with copper rods is expanded, and concentration exercises, which grow more demanding, continue to be practiced.

## Grade 6

Grade 6 children are growing deeper into their physical organism. We support this in Eurythmy lessons with an emphasis on copper rod exercises that help the children find a balance in their physical bodies as well as an awareness of the surrounding space. In tone Eurythmy the students learn to identify musical intervals, complementing their Main Lesson block in acoustics, and then learn the Eurythmy gestures to express the intervals in movement. The octave is emphasized, as this is the interval that Rudolf Steiner indicated would "uplift" the children at this age, preventing them from sinking too deeply into physicality. To complement the Geometry lessons, the children move inversions and transformations of squares, triangles, pentagrams, hexagons, etc. Concentration exercises continue to help the students become independent in their movement while rhythm exercises help them to move more harmoniously as a group.

## Grades 7 and 8

The Eurythmy curriculum for these ages is still drawn from the Main Lesson work. As the children are entering puberty, the exercises are designed to support growth and to establish discipline in the body. Students learn to be aware of themselves in space and to take responsibility for their movements. They continue their work with complex rhythms and forms and begin to do more difficult movements involving the throwing and catching of copper rods. As they consolidate their understanding of rhythm, form, and gesture, and become more self- confident, they engage in longer and more complex presentations, sometimes performed in front of an audience.

## Instrumental Music Curriculum

## Revised 2019

Instrumental music expands a student's musical experience beyond the physical body and allows him/her to gain musical experiences that are only possible with string, wind, and percussion instruments. Instrumental music provides a challenge for students as they work to integrate the intellectual skills needed to understand and follow the music, with the physical skills needed to master the instruments and cause the desired sounds to emerge. Instrumental music at RSSAA is also a highly social experience as the students play together to create an experience for the listener. In the early grades, the students play identical notes on their flutes and recorders, seeking to resolve their individual playing into a unified piece. In the upper grades, they bring their individual parts to the orchestra, all contributing to the final beauty of the music. This process develops both individual confidence and skill and cooperative problem-solving skills.

## Grade 1

- Wooden flutes are introduced
- Students learn by sight and ear
- Class teacher leads students in simple pentatonic folksongs
- A sense of pitch, rhythm, dynamics and expression, along with a joy and love of music, are cultivated


## Grade 2

- The recorder is introduced
- Recorders are more complex than wooden flutes and ask the child to develop his/her thinking and fine motor control.
- Students continue to work on their unison playing
- Focus is on enjoying the experience and deepening each child's appreciation for creating music
- Stringed instruments will be introduced towards the end of the second grade year, with students experiencing all four core instruments (violin, viola, cello, string bass).
- The instrumental music teacher will observe the students, watching for their relationship with each instrument.
- The instrumental music teacher and the class teacher will then meet to make preliminary decisions about which instrument each child should be playing, based on the observations, any therapeutic needs, and class teacher understanding of the child and family.
- The class teacher will then communicate with the parents about which instrument is likely the best fit. Final decisions will be left until fall of third grade.


## Grade 3

- In the fall of third grade, the instrumental music instructor, in consultation with the class teacher and parents, and with observation of the students, and consideration of the balance of instruments in the class, will finalize the selection of a common bowed string instrument for the student to learn and perform on during class.
- Children practice tall, upright body posture with a relaxed left and right hand position.
- Students learn the fluid movements of the bow arm and the placements of the left hand fingers
- Listening skills are developed through the identification of simple musical forms (e.g. ABA or ABBA)
- Sound patterns are modeled by the teacher and echoed by the student
- By the end of the year, students perform a repertoire of over five songs by memory


## Grade 4

- Students continue to play the same string instrument as the previous year
- The class meets twice weekly
- Lessons review the fundamentals of good posture, a relaxed bow hand and left hand position, and creating a beautiful sound.
- The Suzuki Beginning Repertoire introduces string crossings, intonation studies, and bow styles
- Memory songs reinforce a feeling for musical form and musical pulse
- During lessons, string techniques, memory skills, and the reading of musical notation are practiced
- Skills include slur, legato and staccato, G, D and A scales, finger flexibility, bow distribution, and the minor scale.


## Grade 5

- Students chose to continue with their string instrument or move to a wind instrument.
- Strings class focuses on the study of music through skill development on each student's chosen instrument of study and through the understanding of written notation.
- In the first half of the year, they study tone production and steady beat through a repertoire of memory songs, rounds, and written notation.
- During the second part of the year, minor scale fingering is introduced, patterns are added to left-hand technique, bow technique is refined, and the use of harmony and counterpoint is explored.


## Grade 6

- The students are asked to take responsibility for bringing their instruments, organizing their music, and preparing for each class lesson.
- Musically, they continue to master the fundamentals of beginning wind and string playing.
- The winds class works to expand their note range and develop facility in the scale patterns of C , F, G, D, and B-flat concert.
- The string class explores the many different bow styles and adds the minor scale pattern, $1 / 2$ position and individual extensions to their repertoire of skills.
- Throughout the year they study a variety of music that includes separate pieces for the winds and strings, and full orchestral pieces for the entire class.


## Grade 7 and 8

- Through the process of preparation and performance, the orchestra develops each student's instrumental technique skills and broadens his/her musical understanding of structure and expression.
- In the large ensemble, concepts of balance and blend are introduced.
- The intonation tendencies of each instrument family are explored.
- Form and period styles are examined through the performance of folk songs as well as arrangements of major works of music.
- Students have the opportunity to play in duets, trios and quartets at several events throughout the year.


## Recorder Curriculum

Revised 2019

## Grade 1

Grade One students learn to play a Choroi pentatonic flute. These simple wooden flutes possess only the tones of the scale that create the larger, open intervals. Simple songs are played and the experience of listening is cultivated. Finger exercises are practices before flutes are presented (usually by December or January) and continue throughout the year.

## Grade 2

Music in the "mood of the 5th" is gradually replaced by more purely pentatonic melodies. By the end of Grade Two, there are pentatonic songs played that have a definite tonic ending - pentatonic major on $G$ and pentatonic minor on $E$. The songs are about nature and the seasons, and perhaps also about the saints, heroes and fable characters whom the children encounter in their main lesson blocks.

## Grade 3

During Grade Three, most children go through the inner transformation that Rudolf Steiner called the "nine-year change." The child incarnates more fully into the physical body, leaves the magical world of early childhood, and experiences him/herself as an independent being separate from the world. A number of new musical experiences are now appropriate; singing songs in a major diatonic key; playing the soprano (C) recorder (generally by December), and learning the rudiments of musical notation, though in an imaginative way. The keynote $C$ is central now, providing a "landing" point, for the child who is at this stage in the incarnation process.

Spelling with the notes (e.g. "B-A-G") and simple pitch and rhythmic games can be played. (See attached "Activities.") Simple songs including rounds can be sung and then played.

## Grade 4

Having gone through the nine-year change, Grade Four students are ready for another new set of musical experiences. The children will now be able to sing and play simple rounds and canons and descants. Children should master F\#, G\#, C\# and Bb. Holding on to one's own part while listening to the other and to the whole is challenging, and the fourth grader is now ready to take on such an activity. What they sing should express their growing strength and vitality and also their deepening inner life. Songs in minor and major keys are utilized, and the moods they engender are explored. Work on the C recorder is continued, incorporating harmony parts. Various meters are experienced and studied. By the end of the year, the children should be able to sight-read simple melodies.

## Grade 5

Children continue work on the soprano recorder, and alto recorder is introduced - either to a small group of students, or to different, alternating groups so that the whole class experiences both recorders. This new instrument has a new tuning and fingering, and offers a good challenge at the beginning of the year. Many lovely new pieces with melody and harmony can now be introduced - at first, simple tunes (Merrily We Roll Along, Au Clair de la Lune, America, e.g.) and later on more challenging pieces.

The rich American folk music tradition ties in with the study of American geography in Grade Five, providing many songs and recorder pieces suitable for the students.

## Grade 6

Grade Six students can be introduced to the tenor recorder, and, if they have large enough hands, to play it without too much difficulty, as the tuning and fingering is the same as the soprano recorder. Now three-part pieces can be played, which is ideal for much of the medieval music that accompanies the study of medieval history in the 6th grade curriculum. The recorder appeared and came to prominence in the Middle Ages, and the medieval repertoire for the instrument is rich. There are many beautiful two-, three-, and four-part pieces that the class can now play.

## Grade 7

A focus of study in Grade Seven is the Renaissance - a period of cultural rebirth, world exploration, and discoveries in science, astronomy, and other areas. The students experience the rich vocal and instrumental repertoire of the age. Since the recorder was an important instrument during the Renaissance, the seventh graders continue to play music for that instrument, with all four standard versions of the instrument: soprano, alto, tenor and bass.

## Grade 8

Grade eight students may continue to play music in four parts.

## Vocal Music Curriculum

## Revised 2019

The vocal music curriculum is designed to both cultivate the feeling nature of students and help them work as a group as they sing together. The subject is first approached through experience with students learning by ear in the earlier grades; more formal music theory, including the reading of music, is introduced from the middle grades through high school. The singing curriculum includes folk songs, spirituals, traditional music, classical pieces, and music chosen for specific grades to deepen their history and literature studies.

## Grade 1

- Singing is integrated into the day
- The class teacher brings songs to extend the main lesson learning, using music as a transition, and celebrating holidays and festivals through song.
- In addition, a weekly singing class is held with the vocal music teacher.
- Lessons start with exploring what singing is, distinguishing it from speaking.
- Correct posture and the appropriate movements of the mouth are taught
- Use percussion instruments to support students' developing sense of rhythm.
- Students sing a variety of pentatonic folk songs and spirituals.
- The first grade participates, with the second and third graders, in the Michaelmas Festival, Spiral of Light, and last day of school festivals.


## Grade 2

- Class is held once a week.
- Students work with both their high and low registers and learn to sing as a group.
- Help the students to develop a steady and reliable beat
- use percussion instruments to support the pacing, as well as working to match pitch, and read rhythms and solfege (hand signs).
- Many different genres of songs are introduced including folk songs, pentatonic songs, and play songs.
- The class teacher continues to bring a great deal of singing into the classroom during main lesson and subject classes.


## Grade 3

- Singing class continues once a week.
- Elements emphasized include proper and correct singing, utilizing such concepts as posture, breath support, singing with the head voice, and song presentation.
- The class teacher continues to integrate singing into the daily rhythm and routine.


## Grade 4

- Singing class continues once a week.
- Concepts reinforced throughout the year are posture, breath support, solfege, and two-part singing.
- Simple rounds are introduced in the fourth grade year, asking students to hold their place among the others.


## Grade 5

- Singing class is held twice a week
- The concepts emphasized in the class include posture, breath support, solfege, part singing, and song performance.
- Students learn several genres of music including classical, rounds, spirituals and American folk songs.
- Students also prepare music for the Pentathlon and perform at the Spiral of Light and the Spring Assembly.


## Grade 6

- Singing class is held twice a week
- Concepts emphasized in the class include posture, breath support, solfege, part singing, and song performance.
- They learn several genres of music including classical, rounds, spirituals and American folk songs.
- Students spend the majority of the year in singing two- and three-part harmony.


## Grade 7 and 8

- The Chorale meets twice a week.
- The boys and girls of the two classes sing together in gender groups one day a week and the entire group rehearses together once a week.
- The Chorale works on a variety of aspects of singing including solfege, posture, breath support and part-singing.
- They take up a wide variety of music including classical pieces, folk songs, spirituals, and popular music.


## Outdoor Education Curriculum

Revised 2019

## Golden Eagles

- Meets for 4 weeks in the Spring, and 4 weeks in the fall, for a duration of 30 mins.
- Explore local flora and fauna or the "home surroundings".
- Students work with their senses and search for plants with different smells and tastes. In addition, we search for the colors of the rainbow in our "home surroundings".
- Plant milkweed and discuss our shared knowledge of butterflies and other pollinators.


## Grade 2

- Meets for 4 weeks in the Spring, and 4 weeks in the fall, for a duration of 45 mins.
- In preparation for Thanksgiving begin lettuce, broccoli, kale and squash seeds indoors under grow lights. The students are able to watch the progress of these plants and are responsible for keeping them hydrated.
- Explore the key components to growing crops (soil, sun, water and care).
- Mulch paw paw tress and witness their growth.
- Explore local flora and fauna
- Save heirloom corn seed and discuss the life cycle of plants.


## Grade 3

- Meets for 8 weeks in the Spring, and 8 weeks in the fall, for a duration of 45 mins.
- Harvest and preserve the crops planted in the spring in preparation of the Thanksgiving feast.
- Save heirloom corn seed and explore the power of sustainability.
- Observe and practice safe handling of garden tools.
- Explore structures of pollinator habitats.


## Grade 4

- Meets for 8 weeks in the Spring, and 8 weeks in the fall, for a duration of 45 mins.
- Identify and map oak trees on campus.
- Observe and discuss different kinds of animal manure with regards to digestions and suitability for garden fertilizing.
- Notice leaf structures and apply to identification and removal of garlic mustard. This leads to a conversation of ways to encourage biodiversity and support naturally occurring plant communities.
- Decorate and care for the garden goddess on campus.


## Grade 5

- Meets for 8 weeks in the Spring, and 8 weeks in the fall, for a duration of 45 mins.
- Focus on growing lettuce, nasturtiums, spinach, kale and strawberries for salad day.
- Identify cotyledons and true leaves of the above plants.
- Harvest, wash and prepare the salad for their fellow classmates.
- Notice leaf structures and apply to identification and removal of garlic mustard. This leads to a conversation of ways to encourage biodiversity and support naturally occurring plant communities.
- Mulch and care for the surrounding garden area.
- Care and watering of potted plants on campus.


## Grade 6 and Grade 7

- Meets for 8 weeks in the Spring, and 8 weeks in the fall, for a duration of 45 mins.
- Help steward the woods, rain garden and prairie
- Mulch the paths
- Rake the leaves
- Any work that is useful and helps them get "bone tired"
- Work week after week on a task (e.g. digging out a shrub; at first, they think it can't be done [beg for power tools] but they learn they CAN do long, difficult tasks)
- Discuss food scarcity and explore ways to work towards food justice.
- Explore healing herbs on campus grounds and make tea from stinging nettle.
- Design and implement a new garden space outside the middle school building.


## Sex, Health, and Teen Development Curriculum

Revised 2017

## Core principles

- Balance of mind, body and emotions around spirit of "who we are" is the theme of all lessons.
- Boundary setting with others is healthy and necessary.
- Body development and sexual maturation is natural, normal and usual. There is a wide range of normal for children/teens.
- Natural variation of sexuality and gender is to be expected, celebrated and welcomed.
- All students deserve compassion and respect as they learn about their developing selves and others who may be very different from them.
- Girls need "boy" information and boys need "girl" information but some discussions are better held in separate gender groups.
- Options for anonymous questions will be given so that nobody needs to ask "embarrassing stuff" out loud.
- The world is an exciting place and curiosity about different kinds of people is healthy even if you don't always agree or come to the same conclusions.
- Everyone has challenges and honesty and authenticity are values that support healthy approaches to facing challenges.
- Sex Health Subject Teacher should attend parent nights to discuss the curriculum with parents and to discuss how they can support their developing tween/teens about these issues (4 hours).
- Students are encouraged to identify, develop and preserve trusting, safe relationships with trust worthy adults who they can count on for accurate, clear and helpful information on issues of concern or questions that arise for them.


## Grade 5

Curiosity about changes to come: (6 hours of lessons over 3 or 4 class periods)

- What to expect during puberty
- Normalizing changes
- Providing basic but correct language about puberty
- Answering questions and clearing up misconceptions about bodies and changes
- Boundary setting: What are boundaries? How do I know I need to set them? What are my "Uh Oh" feelings and how to trust those? What words can I use to let somebody know what I need or don't want? What do I do if they are not listening to me? How do I do this with friends (peers), adults that I know, strangers? How do I get help if I'm scared, hurt or overwhelmed?
- Responsible phone and computer use and what to be aware of for safety
- Separate gendered discussions where more specific questions can be asked.


## Grade 6

Sexuality as part of Health: (4 hours of lessons over 2 class periods)

- Puberty - covered in more detail than in 5th grade. Students will presumably have more questions this year as more of them will be entering puberty.
- Gender and sexuality
- Age group is adept at talking about expectations for boys and expectations for girls. They are now aware of differing treatment in society.
- They are also generally aware of individuals who are gender non-conforming and have some level or curiosity or questions about this.
- Sexuality is also something they are more aware of and they have questions about sexual feelings, crushes and thoughts about opposite gender vs. same gender attraction.
- Correct, open discussion often leads to less use of pejorative terms or fear about these differences.

Boundaries: (2 hours of lessons over 1 class period)

- Boundary setting skills
- Cyber safety from the 5th grade lessons can be added depending on time and what is happening in the class


## Grade 7

Sex, sexual decision making, pregnancy, gestation, birth: (4 hours of lessons over 2 class periods)

- During the 7th grade physiology block, the main classroom teacher has covered sexual anatomy.
- Jointly taught with a midwife
- Discuss the following topics:
- what sex is
- how someone knows if they are ready for sex
- the purpose of sex
- how a baby is created
- how pregnancy can be prevented
- how a baby grows in utero
- how birth happens
- challenges of birth
- Use illustrations of gestation and a "soft sculpture" pelvic model with newborn baby, umbilical cord and placenta used for describing birth.
- In the second lesson, answer any/all questions that have been submitted anonymously at the end of the first lesson.
- Divide class along gender lines for the second part of the lesson
- Facilitate two separate group talks to answer any additional questions they didn't wish to discuss in the mixed gender group.

Teen problem solving skills: (4 hours of lessons over 2 classes)

- Introduce topics and offer behavioral options for how to handle challenges that arise.
- Discuss the following topics:
- Increasing empathy for others
- Team building in the classroom
- Risky teen behaviors
- Navigating social media and popular culture
- The use of hurtful language
- Health questions
- Intervening as a bystander in bullying behavior
- Setting boundaries and standing up for yourself if you are targeted for hurtful behaviors, racism, sexism, homophobia, cultural differences
- How to understand changing relationships with peers and family.
- Self-defense and assertiveness training to build on the boundary setting skills taught in the earlier grades.


## Grade 8

Balancing my changing body, mind and emotions. What do I need now? (6-10 lessons over the year)

- Continue to look at the issues that have been covered in previous years.
- Issues are discussed with an eye toward making the leap to high school.
- Talk about additional responsibilities, growing freedoms and a wider awareness of the world, popular culture and challenges that students can/will likely face.
- Issues may include:
- Risky teen behaviors
- Navigating social media and popular culture
- Being aware of depression and anxiety
- Health questions
- Intervening as a bystander in bullying behavior
- Setting boundaries and standing up for yourself if you are targeted for hurtful behaviors, racism, sexism, homophobia, cultural differences (other "isms" etc.).
- Discuss how to understand changing relationships with peers and family including building/maintaining trust with parents as students seek more time away from adult supervision
- Talk about navigating dating when it arises
- Topics and activities chosen are based on discussion with the class teacher and from what is observed/heard from the students.
- Upper grade students from the high school are selected to join a panel. The purpose of the panel is to talk about the transition from 8th grade to high school and what they now "know to be true" vs. what they thought in middle school.
- Hold at least 2 sessions with the high school students so that separate gender discussions can take place as well as whole class work.
- Self Defense lessons can also be brought in as an extension of boundary setting lessons in the earlier grades.


## Concluding thoughts

- For many of our students who do not continue to RSHS this will be the only sex ed/teen empowerment skill building that they will receive (beyond abstinence only lessons and disease discussion).
- For the students continuing to RSHS, these lessons provide the basis for high school level reproductive biology lessons, health class discussions, self-defense as part of movement, and meditation/relaxation classes where more sophisticated material can be provided and digested.
- These lessons also set the tone for respectful and supportive relationships for students as they navigate high school and beyond.


## Social Health Curriculum

Revised 2020

All classes in the Lower School Campus are encouraged to come together in small groups to foster collaboration and engagement within the grades and among the Grades and Early Childhood community. The aim is to strengthen and diversify our school's social fabric.

## Cross-level Partnerships (Early Childhood and Grades)

In order to bring our Lower School community closer together and help the children to build relationships and a sense of community service we have created partnerships between the Early Childhood and Grades classes. There are a variety of things that these groups of three could join for:

- Social Inclusion needs: while larger or more serious issues would still be held by the care group or Student Social Action, more minor issues could be held between the class teachers by pairing children together to assist each other during the school day.
- Invitations to join each other for events like festivals, class plays, puppet plays, classroom visits, projects, tea, picnics, etc.
- Community Service: helping tidy each other's hallways, baking a loaf of bread or other snacks to share with partner classes. Anything that would be helpful to the partner class!
- Meditative life: we hope that if it speaks to you, you will consider holding your partner classes in a way that is like how you hold your own class. It would be so nice to help support each other and the children of the school in this way.

The groupings below will stay the same each year:

- Bluebirds, Grade 4, Grade 8
- Redbirds, Grade 1, Grade 5
- Robins, Grade 3, Grade 6
- Chickadees, Grade 2, Grade 7


## Student Social Action Committee (SSAC)

As Middle School students try to make sense of the world around them it is so important for them to do projects that have a tangible impact on the environment, community and people around them. The Student Social Action Committee will hold and lead specific interventions throughout all of the community, though mostly with the Lower Grades. Training for the Student Social Action Committee (SSAC) will begin in the spring of Grade 7 and continue through Grade 8. The partnerships throughout the Grades and Early Childhood aims to prepare students for their work in the SSAC and develop relationships with younger students in our school community. The coordinator of the SSAC ideally is a Lower Grades teacher who collaborates with the MS teachers.

## Grade 6

- Activities are left to the discretion of the grade 6 teacher depending on the developmental needs of their grade 6 class but could include weekly visits to the EC and/or to their partner class.
- Begin Student Social Action Committee training in the spring of Grade 6 (After Mid-Winter Break).


## Grade 7

Actively take up more responsibility in service to the community.

- Lead Michaelmas Games
- Support Early Childhood Halloween with skits, characters for their walk/parade
- Support and lead Zero Waste efforts in the school
- Empty all school recycling and compost bins
- Educating Lower Grades with recycling, composting (city and garden) education.
- Continue Student Social Action Committee training in the spring of Grade 7 (After Mid-Winter Break).


## Grade 8

- In-reach
- SSAC during most of $8^{\text {th }}$ grade, primarily first half of the year. Seventh grade takes up work towards the end of the eighth-grade year.
- Share recess with Lower Grades
- Have buddies
- Circles
- Create Code of Compassion for all School Community (ideally created by Thanksgiving).
- Out-reach
- Food Gatherers
- Huron River
- GIVE 365
- University Living
- Alpha House

Note: See Cyber Civics Curriculum and Sexual Health Curriculum.

## Woodwork Curriculum

## Revised 2019

Woodworking, introduced in the fifth grade, asks student to simultaneously engage their physical skills and their aesthetic sensibilities, while working hard to complete challenging projects. Woodworking at the Rudolf Steiner School of Ann Arbor is primarily a sculptural activity, with students drawing the shapes and forms out of blocks of wood, rather than a construction activity.

## Grade 5

- Shape the convex forms of mice and eggs
- Offer an opportunity to expand to other animals if time permits
- Lead the students to understand that the shapes await them inside the wood, and that their work is to reveal them.
- Manage handsaws, vises, clamps, hand rasps, shavers and sandpaper to shape the wood.


## Grade 6

- Students learn to carve a spoon.
- Begin with a paper design and transfer it onto the wood.
- Select from basswood or mahogany blanks that range from six to twelve inches in length.
- Apply the skills learned in Grade 5 to shape the exterior bowl of the spoon and begin carving
- As each bowl is completed, the shape and style of the handle arises out of what is complementary to its form and breadth. This promotes the children's creativity.
- Once carved the spoon is sanded and finished with oil.


## Grade 7

- Students apply the practical skills learned in grades five and six to design and make original projects.
- Common projects are boxes, bowls and cups, masks, signs, swords, and other sculpted designs.
- Each student designs his/her project, selects appropriate wood, and works in a manner that forms the project, which allows for an aspect of carving to be incorporated into it.
- For some students, carving takes precedence; for others, it complements the constructive work.


## Grade 8

- Students design and construct a small piece of furniture, usually a small stool or table.
- Each student chooses the appropriate wood and then shapes the legs and seat or tabletop using rasps and spoke shaves.
- Power drills are used to make mortise and tenons.
- The goal is to create a project that is both practical and beautiful.


## World Languages Curriculum

## Revised 2019

Spanish and German are taught at the Rudolf Steiner School of Ann Arbor with two goals - to develop a positive interest and attitude towards other cultures, and to develop a command of the individual language. Through learning another language, a student learns to see the world from another viewpoint, and gains access to another perspective on the world. In grades one to seven the school's two languages are taught in alternating three- to four-week blocks with four weekly lessons each. Depending on class size and class composition, the school decides on a yearly basis what arrangement is the most appropriate for the eighth grade class. In recent years, students have continued with the alternating blocks in some years, while in others they have chosen one language to specialize in during the second half of eighth grade.

## German

## Grade 1

The language is taught as whole language. Lessons are held in the target language, aided by gestures, tone of voice, and a variety of props. Students primarily repeat chorally after the teacher. On occasion, individual responses are encouraged.

Vocabulary:

- Greetings and polite phrases
- Common verbs
- Body parts
- Numbers up to 24 , possibly to 100
- First food stuffs
- Common animals
- Family members
- Sun, moon and stars
- Directions


## Subject matter:

- Seasonal songs, fairy tales (Little Red Riding Hood), recitation of children's rhymes and verses


## Grade 2

The language is taught exclusively orally in the target language with students predominantly repeating after the teacher or reciting on their own either as a whole group or in smaller groups. Individual reciting or responding to questions is encouraged.

## Vocabulary:

- Items in the classroom
- Clothing
- Fruits and vegetables
- Days of the week
- Names of months
- First weather phenomena
- Seasons


## Grammar and syntax:

- Question and answers
- Students follow teacher's directions to execute little tasks


## Subject matter:

- Repetition and broadening of Grade One material
- Short, funny skits which students memorize and perform to the class (e.g. Auf der Bank sitzt der Pfau; Großmutter kann nicht gut sehen).
- Dramatized fables and/or stories of holy people with most of the class speaking as a chorus, but also short individual roles included. BINGO with numbers and food items, singing and movement games.


## Grade 3

The language is taught exclusively orally and in the target language. Students repeat after the teacher, recite on their own, answer questions and perform in skits or a longer play. Parts of the lesson are dedicated to question and answer segments, or students follow teacher's requests to perform activities in the classroom. Grammar phenomena are introduced within a skit or a game. In the older grades, this grammar will be repeated and brought to consciousness.

## Vocabulary:

- Material from previous grades is repeated and broadened
- Materials (in connection with ML)
- Some grains (in connection with ML)
- Some trades (miller, farmer, baker).
- Verb "to thank" with dative case
- Time of day, clock time


## Grammar and syntax:

- Alphabet
- Question and answers
- Comparison of adjectives
- Adjectives used predicatively or attributively (The flower is red, it is a red flower. Die Blume ist rot, sie ist eine rote Blume.)
- Negation using nicht and kein/e.


## Subject matter:

- Repetition and broadening of subject matter from previous grades.
- Interviews with questions about individual student
- Question words (where, what, who, which, when?)
- Skit about baking bread.
- Performance of longer fairy tale with individual roles.
- Games with food stuffs
- Verses
- Rounds
- Games


## Grade 4

The written form of the language is introduced via previously memorized verses and other material. Students recognize, "read", and copy familiar material written on the board. Students discover spelling rules and receive their first spelling practice tasks. Most vocabulary, prose, and poetry from previous years are copied into students' books. The first chapter book containing mostly familiar vocabulary is introduced mid-year. A description of themselves is the students' first guided creative writing exercise.

## Grammar and Syntax:

- First verb conjugations by rote
- Personal pronouns
- Singular and plural nouns and pronouns
- Adjectives, attributive and predicative
- Question words and word order
- Compound nouns


## Vocabulary:

- Animals and their features
- Floor plan of the school
- The four directions /compass
- Likes and dislikes, favorites


## Subject matter:

- Tongue twisters and riddles
- Introduction of written language
- First creative writing exercise
- Easy chapter book
- Laying the table
- Songs and poetry
- Mental Math with all four processes


## Grade 5

Lessons are conducted mostly in the target language. Material from previous grades is practiced and expanded. A preview of a new story's content is usually provided in the students' first language.

Comprehension is supported by picture material and Q\&A segments in each lesson. Students continue to practice reading aloud either by themselves or in small groups. Regular spelling practices are part of the weekly rhythm.

## Grammar and Syntax:

- Conjugations of regular verbs and also of some with vowel changes in present and simple past tenses ( schreiben, lesen, trinken, essen, schlafen, hören, zählen, gehen, a.o.)
- Memorize and practice use of conjugations of "haben" and "sein" both in present and past tenses
- Introduction of direct object case
- Word order in questions
- Formal and informal address
- Some common prepositions (auf, an, in, hinter, unter, mit, ohne)
- Regular verbs in imperfect


## Vocabulary:

- Adjectives in rhymed opposites
- House and its rooms
- Food items and meal times
- At a restaurant - menu with a few typical German dishes
- City scape


## Subject matter:

- First chapter book Kasperle und Gretel
- Dramatized version of the fable: The Wolf and the Bread
- Songs and poetry connected to ML blocks of Ancient History and Zoology
- Dinner/lunch/coffee hour at a restaurant


## Grade 6

More complex grammar is introduced while basic features continue to be practiced in various ways. Likewise, vocabulary is expanded. Geographical and cultural features of Germany/or Austria/or Switzerland/ or Liechtenstein are presented through stories and plays. Recognizing students' wide range of abilities, the teacher frequently creates plays with roles of varying degrees of difficulty so all students can be successful.

## Grammar and Syntax:

- Introduction and memorization by rote of many irregular verbs
- Direct and indirect object cases (direct articles and pronouns) Switching of word order (Der Hund beißt den Mann. Den Mann beißt der Hund.)
- Prepositions with accusative or dative cases
- Imperative in singular. plural and formal forms ( gib mir.., gebt mir.., geben Sie mir..)
- Introduction of passive voice


## Vocabulary:

- Repetition and broadening of previously introduced material
- Family members and relationships
- Broaden and practice vocabulary of food items
- Landscape and weather
- List of classroom frequently used classroom phrases

Subject matter:

- First geography of Germany in context with either ML mineralogy (Ruhr-Gebiet and iron/coal) or ML Roman studies (Roman Limes)
- Easy chapter book - Lotte soll nicht sterben
- Dramatized short story: Rosinenbrötchen
- Money -Euro Dollar and Swiss Franc
- Poetry, songs and proverbs


## Grade 7

Material from the earlier grades reappears in more complex contexts and continues to be practiced. Genitive, direct and indirect object cases present major difficulties for English speaking students and needs to be practiced a lot. Modal verbs, passive voice, word order in two-verb sentences, use of adverbs and corresponding word order are all features different from the English language and often present difficulties for less apt students. Assessment needs to take into account whether a student is mostly visually, kinesthetically or auditorily oriented.

## Grammar and Syntax:

- Modal verbs (can, must, may, should, like, want to- können, müssen, dürfen, sollen, mögen, wollen) in present and imperfect tenses
- Placement of verbs in "two-verb" sentences
- Positive, comparative and superlative adjective and adverb forms
- Comparisons using "better than" and "as good as"
- werden - only with meaning of "to become"
- Practice and broadening of material from previous years, esp. irregular verbs, agreement of adjectives with gender, number and case of noun


## Vocabulary:

- Personal qualities and physical descriptions
- Weather phenomena
- Complex written numbers
- Students' daily activities
- Adverbs of time
- 24 hour clock, weekly class schedule, school calendar


## Subject matter:

- Riddles
- Tongue twisters
- Poetry and songs
- Geography of Europe, esp. German speaking countries
- Tall tales - in dramatized form (Münchhausen, Schildbürger, Til Eulenspiegel)
- Work with English-German/German-English dictionaries


## Grade 8

Students may choose to take exclusively German all year.

## Grammar and syntax:

- Review and expansion of grammar from previous years
- Direct, indirect, and genitive object cases - definite and indefinite articles, and pronouns
- Present perfect and imperfect (conversational and written past tense)
- Word order with adverbs at the beginning of sentences
- Rules for determining gender
- Cognates and "false friends"
- Prepositions and their respective cases (esp. mit, ohne)
- Verbs demanding dative case (helfen, gefallen, gehören)
- Future tense
- Reflexive verbs (sich freuen auf, sich ärgern über)
- Subordinating and coordinating conjunctions


## Vocabulary:

- Review and expansion of previously introduced vocabulary
- House
- Fruits and vegetables, implements needed for cooking
- Clothing
- Animals
- Means of transportation
- Landscape and natural features
- Family
- Likes and dislikes
- Weather


## Subject matter:

- Biographies from German speaking countries
- Geography of Germany with focus on federal states' geography
- Picture stories
- Songs, poetry and plays
- Speech choruses
- Morning Verse


## Criteria for assessment:

- Understands teacher's or class mates' requests and questions
- Asks and/or answers teacher's or classmates' questions
- Uses common classroom phrases in interactions with the teacher or class mates
- Speaks clearly and in complete sentences
- Gleans meaning from an spoken or read unfamiliar text
- Reads fluently both familiar and unfamiliar texts
- Writes in complete sentences
- Writes with command of spelling rules
- Uses correct verb endings, tenses and correct word order in connection with adverbs and conjunctions
- Retells details of a biography
- Creates a text for a picture story
- Speaks about likes and dislikes
- Speaks about his room, house, dream house, plans for vacation
- Uses dictionaries


## Spanish

## Grade 1

- Spanish is taught orally, and incorporates repetition, movement, and a variety of visual aids.
- Emphasis is placed on listening and learning to pronounce the language through poems, songs and games.


## Curriculum:

- Greetings
- Numbers 1-20 (may go to 1-40)
- Body Parts
- Colors
- Directions
- Animals (pets, farm)
- The classroom
- Clothing
- Folk Dances
- Fairy tales


## Grade 2

- Spanish is taught orally.
- Students build upon the skills gained in Grade 1.
- Emphasis is placed on basic greetings and common phrases through games, poems and movement.
- Songs, games and poems are used to learn the alphabet, vocabulary and basic grammar.


## Curriculum:

- Review and expansion of Grade 1 curriculum.
- Fruits
- Vegetables
- The weather
- The Seasons
- Date in Spanish
- The family
- Personal Information (I wash/comb my hair/dress/have breakfast)
- Fables
- Stories of the saints


## Grade 3

- Spanish is taught orally.
- Previously learned vocabulary is reviewed and expanded.
- Playful first reading happens through songs and poems.
- Stories learned in class are retold out loud to promote fluency.
- Curriculum:
- Review and expansion of previously learned material in Grades 1-2.
- The clock, time
- The house and its parts
- The farm
- Grains
- Musical Instruments
- Occupations
- Personal Information (family, home)


## Grade 4

- Vocabulary learned in previous grades are reviewed, and expanded.
- Reading and writing in Spanish are introduced.
- Basic spelling rules and grammar are introduced.
- Speaking is expanded to include new vocabulary, grammar structures and answering basic questions.
- To practice writing skills students label pictures in their Grade 3 Spanish book, and create their own Grade 4 textbook.


## Curriculum: Vocabulary and Culture:

- Review and expansion of previously learned material in Grades 1-3.
- Tongue-twisters
- Buildings in town
- Description of places
- The compass
- Places in school
- School supplies
- Health

Curriculum: Grammar:

- Introduction to Spanish sentence structure.
- Adjectives
- Definite and indefinite articles.
- Gender-number agreement of adjectives, articles and nouns.
- Prepositions
- Interjections
- Personal pronouns
- High frequency regular/irregular verbs in the present indicative.


## Grade 5

- Review and expand vocabulary learned in previous grades.
- Speaking is expanded through recitation of poems, songs, riddles, skits and tongue-twisters.
- Students are strongly encouraged to speak individually to promote fluency and pronunciation.
- Reading is expanded through the incorporation of a reader that includes stories and poems.
- Students are guided to answer questions that demonstrate comprehension of a text.
- Writing is expanded through the introduction of new grammatical structures.
- Regular spelling practices are introduced.


## Curriculum: Vocabulary and culture:

- Review and/or expansion of previously learned material.
- Plants, flowers
- Food
- Description of places (school, house)
- Opposites
- Likes and preferences
- Nature and the environment
- Daily Routine
- Meals in a day
- Setting up the table
- Pre-Columbian cultures (legends)
- Geography of Mexico
- Riddles
- Short skits
- Dialogues (partner conversations)
- Class reader


## Curriculum: Grammar:

- Review and/ or expansion of previously learned grammar.
- Formation of plural forms of nouns.
- Prepositions
- The present indicative of regular -ar, -er, -ir verbs.
- Introduction to the present indicative of irregular verbs.
- Introduction to the reflexive.


## Grade 6

- Review and expand features learned in previous grades.
- Students are encouraged to speak regularly in class.
- Emerging Spanish speaking cadence is expected.
- Students should be able to recognize the structure of a sentence in Spanish, and its components.
- Conjugations of regular and irregular verbs in preterit are introduced.
- Reading and grammar expand through the incorporation of a reader and its workbook.
- Writing is expanded through writing stories learned in class and illustrating them in their books.
- The geography and cultures of Central America are introduced.


## Curriculum: Vocabulary and culture:

- Review and/or expansion of previously learned material
- Sports
- Vocabulary of geometry
- Physical descriptions (people)
- Proverbs
- Synonyms/antonyms
- Text reader and workbook
- Using a Spanish-English dictionary
- Stories of the Roman Empire in Spain, and Spanish heroes
- Geography of Central America
- Skits
- Dialogues (partner conversations)
- Letter writing (Pen-Pals)


## Curriculum: Grammar:

- Review and/or expansion of previously learned grammar
- Direct Object, and Direct Object Pronouns
- Irregular verbs through memorization
- Interrogatives
- Adjectives (possessive, demonstrative)
- Reflexive pronouns


## Grade 7

- Review and expand features learned in previous grades.
- All four language skills (reading, writing, speaking, listening) expand through the focused study of cultural, geographic, and historical themes in South America.
- Students should be able to express themselves orally competently in simple sentences in the present indicative.


## Curriculum: Vocabulary and Culture:

- Review and/or expansion of previously learned material.
- School calendar and class schedule
- Pre-Columbian cultures (history and legends)
- Geography of South America
- Biographies (conquerors and explorers)

Curriculum: Grammar:

- Review and/or expansion of previously learned grammar
- Indirect Object and Indirect Object Pronouns
- Prepositional pronouns
- Conjunctions
- Prepositions
- Ser/Estar (Present Indicative)
- Comparisons


## Grade 8

- Review and expand features learned in previous grades.
- Students are expected to speak with ease about themselves and engage in dialogue dealing with everyday situations.
- Classes focus on biographies, culture, geography and special topics from Spanish speaking countries.
- Grammar is expanded with the introduction of the preterit, the future compound, the present progressive, and basic command forms.
- Complex verbs (irregulars and stem changing) are introduced.
- Grammar skills are brought into focus with regular text translations.


## Curriculum: Vocabulary and culture:

- Review and/or expansion of previously learned material.
- Moods
- Biographies
- Geography of Spain
- Curriculum: Grammar:
- Review and/or expansion of previously learned grammar
- Stem changing verbs
- Adverbs
- Tener, Ir, Querer, Hacer (Presente Indicativo)
- Preterit of regular verbs
- Present progressive, Present participle
- Compound future tense
- Basic commands

