Lower Elementary

Curriculum Guide

1st - 3rd Grade



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Harnessing the power of imagination and becoming productive, self-directed learners

In Lower Elementary, long blocks of work time encourage extended spans of concentration. Imagination is an integral developmental aspect of this age, and the classrooms are structured to nurture and support students to learn and make meaningful connections. The multi-age setting provides the perfect environment for spontaneous activity. The first grade students observe what lessons and experiences that they'll be directly receiving in the coming grades. Conversely, the older students have the opportunity to reflect on how far they have come when they observe lessons they have had previously. In the Lower Elementary grades, it is a time for students to demonstrate responsibility for themselves as people, as members of a community, as well as their own learning and behavior.

The Lower Elementary Prepared Environment

The Lower Elementary classroom is a student centered environment. All of the materials are organized for students to access independently. As a community, students take responsibility for maintaining a clean and organized classroom. During morning work cycles, students engage in small group or individual lessons. After these individual and small group lessons, students make choices about the work they will pursue. Of course, needed limits and structures are provided so that all students are challenged and proud of their success.

Learning continues to be hands-on in Lower Elementary, with Montessori materials available for students to explore and construct their understanding of new concepts. In addition to the Montessori materials, the classrooms have teacher-made materials as well as classroom libraries to spark curiosity and learning as well as to inspire a lifelong love of reading

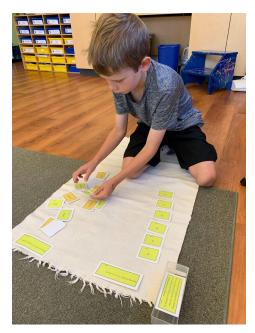
The Lower Elementary Work Plan

One important change that happens as children move from Children's House to Lower

Elementary, is the introduction of the Work Plan. As adults we can recognize how important it is to plan our work and stay on top of deadlines. Learning this process begins in Lower Elementary at Riverbend. When students have a lesson with a teacher to learn a new concept or be introduced to a new material, they are then given a follow up assignment. These assignments are tracked in their daily planners. When work plans are first introduced, students learn to complete the assignments right away. As they grow and develop, students begin to understand how to make longer range plans for their work. They may be given an assignment that is due in two or three days as a way of developing the habit of planning work that must be completed.

Of key importance within the Lower Elementary work plan is the Montessori concept of Liberty within Limits. After engaging with teacher-directed lessons, students may make choices about when they do their follow up work. However, the expectations are clearly set and monitored that students will ultimately complete this work. Our highest goal is to develop and honor intrinsic motivation within each child. Yet along the way, we acknowledge that different children will need different forms of encouragement and oversight in order to meet these expectations. There are appropriate limits set within the classroom so that all children are supported to meet rigorous academic standards.

LITERACY



The Lower Elementary years are a time of explosive growth in literacy. Over the course of the three years in Lower Elementary, students truly develop as readers and writers. Literacy work within our Montessori model inspires students to become lifelong readers and writers who think deeply about texts and the world. By the end of the three year cycle, students are able to: Read grade level text fluently and with expression, use phonetic skills to decode unfamiliar words, identify genres such as fiction and nonfiction, summarize short passages, and

comprehend and respond both orally and in writing to grade level texts.

In addition to this incredible growth in reading, students flourish as writers. Lower Elementary students have the opportunity for many kinds of writing including creative writing, research-based writing, and text-based analytical writing. Students learn to revise and edit their writing through a writing process approach. Through this process, students learn about proper mechanics such as capitalization and punctuation, as well as how to edit their work for spelling errors. By the end of the three year cycle, students will be drafting, revising, editing, and publishing multi-paragraph essays and stories.

In addition to Montessori phonics materials, Lower Elementary students continue with the phonics program begun in Children's House, Fundations. Fundations is a highly structured, multisensory approach that solidifies students' ability to read and spell accurately. Fundations is taught to students in grade level groups outside of the main classroom. Students can follow up on these grade level lessons through independent work during the work cycle.

In addition to phonics work to build solid decoding and spelling skills, students in Lower Elementary engage in higher order thinking and discussions about literature. This happens both through read aloud and independent reading, using a range of text types and levels. Small groups practice shared inquiry when they discuss the stories, and also complete follow up reflections in their reader's journals.

In <u>this chart</u>, you can see the progression from the first year through the third year that follows the Common Core Standards. Because we teach students in the three year cycle, they may go beyond the grade level listed here, or they may spend more time in one grade level before progressing to the next. By the end of the three year cycle, we find that our students have had the opportunity to meet or exceed the third grade expectations listed here.

MATHEMATICS

The ideas of number concepts, place value, numerals, and related quantities are reinforced and expanded upon within the Elementary program. Newfound purposes for familiar math

materials provide children with the means to consider number concepts, mathematical operations, and more complex functions, helping to expand advanced mathematical knowledge and understanding.

In Lower Elementary, students are presented with lessons using concrete, hands-on materials. These Montessori materials will be familiar to students who went through the Montessori primary years. As they



enter Lower Elementary, the familiar materials are used to introduce new and deepening concepts. Using concrete materials allow students to construct a deep understanding of mathematical concepts. As they develop strong conceptual understanding, they can move from the concrete representations of mathematical concepts, into a written representation, and ultimately to the abstractions of written algorithms. Over the course of the three year cycle in Lower Elementary, students become experts in understanding place value through 1,000. They master addition and subtraction facts as well as multiplication and division facts. By the end of the third year, students are able to apply the four mathematical operations to independently solve multi-step problems. In addition to basic number concepts, students engage in an in-depth study of fractions and geometry. The hands-on approach allows students to develop a concrete understanding of mathematical concepts that stretches beyond what is typically taught in the early elementary years.

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CULTURAL STUDIES

Cultural studies are interdisciplinary and integrate zoology, botany, geography, geology,

physical and life sciences, and anthropology. Children explore the interconnectedness of all living things. Additionally, in-depth studies of history, physical and political world geography, civics, economics, peace and justice, the arts, world language, and physical education are introduced.

In Lower Elementary, the Montessori Method uses Five Great Lessons as an introduction to all topics, providing a "big picture" to demonstrate how the sciences, art, history, language, and geography are interrelated. Students are then introduced to increasing levels of detail and complexity within these broad areas. Over



the course of their three years in Lower Elementary, students will learn The Great Lessons which are presented in a group format and then supported with follow up lessons and work that can be engaged individually or in small groups.

The Great Lessons

The Story of Creation of the Universe describes how minerals and chemicals formed the elements; how matter transforms to three states of solid, liquid and gas; how particles joined together and formed the earth; how heavier particles sank to Earth's core and volcanoes erupted; how mountains were formed and the atmosphere condensed into rain, creating oceans, lakes, and rivers. Students are introduced to lessons in physics, astronomy, geology, and chemistry. For example, they learn about light, heat, convection currents, gravity, galaxies, planetary systems, Earth's crust, volcanoes, erosion, climate, and physical geography.

The Coming of Life explains how single-cell and multi-cell forms of life became embedded in the bottom of the sea and formed fossils. The Paleozoic, Mesozoic, and Cenozoic periods are traced beginning with the kingdom of trilobites and ending with human beings. A timeline shows the beginning of invertebrates, followed by fish and plants, then amphibians,

reptiles, and birds and mammals. This is the basis for lessons in chemistry, nutrition, categories of animals and plants, care and requirements of different animals, and their interrelationship within an ecological system. Students are introduced to the formal scientific language of zoology, botany, and anthropology.



The Story of Humans introduces human beings and their unique endowments of intellect and will. The aim is for the children to imagine what life was like for early humans. This is the basis for lessons in prehistory and the emergence of ancient civilizations. Students are introduced to an analytical tool to compare cultures, and how climate and topography influence culture

and political geography.

The Story of Language describes the origin, structure, and types of writing and speaking. It begins with a discussion of the Egyptians, who had two kinds of symbols – one for ideas and one for sounds. The story goes on to describe the Phoenicians, who used the Egyptians' sounds but not symbols. Next, it describes the contributions of the Hebrews, Greeks, and Romans. Students use grammar materials which help them examine how language is put together, and refine capitalization and punctuation. They are introduced to the study of the origin of English words from other languages, the meanings of prefixes and suffixes and different forms of writing, such as poetry, narratives, and plays.

The Story of Numbers emphasizes how human beings needed a language for their inventions to convey measurement and how things were made. The story describes how the Sumerians and Babylonians had a number system based on 60, which is the reason for our 60 second minute and 60 minute hour. Greek, Roman, Chinese and Arabic numerals are introduced

during the lesson. The students are shown how some numerals are borrowed and used by other cultures. For example, Indian numerals had something that no other number system had, the zero. This is the basis for learning mathematics, which is integrated into all studies. Large numbers are needed when measuring time and space in astronomy, negative numbers are needed when measuring temperature changes; triangulation was needed to reestablish property boundaries after the Nile flooded Ancient Egypt.



PRACTICAL LIFE / SOCIAL EMOTIONAL LEARNING

Social Emotional Learning plays an important part in the Lower Elementary day. Students show independence when preparing to enter the classroom and preparing their work plan



for the day. Self-regulation is supported through the establishment of community rules and guidelines, which are practiced and reinforced during Morning Meeting and other community gatherings. Care and practice in self-regulation occur as students move through the school day, both in the classroom and transitioning from work cycle to special classes. Each student actively contributes to the community through classroom jobs that rotate periodically.

Students also begin to build an identity for themselves as learners in the Lower Elementary

program. They reflect on their preferred and less preferred areas of the classroom, and with the guidance of their teachers, they learn to balance their work plan. Students also reflect

on their work at the end of the week, considering the quality of their work, what they did well, and how they can improve.

Over the course of their three years in Lower Elementary, students develop an ability to concentrate on a chosen task, to sustain and complete a work cycle, to complete assignments independently and to transition from finished to new work smoothly. They learn to organize their materials and their work, and to collaborate with others in completing group projects. Perhaps most importantly, Lower Elementary students develop a sense of being part of a group. Through their collaborative work, they develop empathy as well as an ability to resolve interpersonal conflicts peacefully. They see beyond themselves as individuals and take on responsibility for the group– including the classroom group, the school as a group, and the wider community beyond the school.