



Elementary 1 Curriculum Outline

Rochester Montessori School

“Our students are equipped in their whole being in their adventure of life, accustomed to the free exercise of will and judgment, illuminated by imagination and enthusiasm.” – Maria Montessori

Introduction

The Rochester Montessori School elementary program is organized into two three-year cycles: E1 for the first through third grades and E2 for the fourth through sixth grades. As in the Children’s House program, multi-age groups offer lasting benefits. By working closely with children for a period of three years, teachers know each child’s learning style, strengths, interests, and capabilities. Teachers can then offer more effective lessons for meeting each child’s needs. Children form lasting friendships as they and their teachers develop a strong sense of community.

The classroom teachers are both instructors and guides in support of the program’s academic and developmental goals. The teachers provide daily lessons that are appropriate for each child’s progress and development.

Learning to become independent thinkers and self-directed are two developmental goals of the elementary program. We strive to understand and then challenge each child according to his or her developmental needs and capabilities. Children learn to become responsible for their own learning as they make daily decisions and choices in our child-centered classrooms. Becoming mindful of the consequences of choice is an essential habit for success in life.

The Classrooms

Our elementary classrooms are exciting places of learning because the children are active participants. At this age, children enjoy learning

with others. You are likely to see children working together to parse sentences, reduce fractions, or research life in Colonial America. Learning to collaborate is an important part of the learning process.

The elementary child’s learning activities occur both within the classroom and also in libraries, museums, and other sites that contain the information they seek as they satisfy their hunger for knowledge and understanding.

Experiential learning takes place in each classroom in a variety of formats as children explore anthropology, biology, botany, chemistry, earth science, economics, geography, geometry, history, language, literature, mathematics, psychology, sociology, technology, and more.

The Great Lessons

Topics from these subjects are presented to E1 students in an ecological, holistic, and integrated format known as The Great Lessons. The intent of the Great Lessons is to give a “cosmic” perspective of the Earth and humanity’s place within it. The five Great Lessons concern how the world came to be, the development of life on Earth, the story of humankind, the development of language and writing, and the development of mathematics.

Follow up lessons, stories, individual studies, research, and projects occur during the entire six years of the elementary program, both E1 and E2. Elementary children respond well to the classroom stories told about the history of the universe and humanity. These stories further ignite the children’s interest in the details of science, math, social science, and language. The stories further emphasize the connections between the different areas of study.

The Curriculum

Our curriculum includes lessons in spelling, mathematics, grammar, sentence analysis, creative and expository writing, and research skills. Elementary students also study the worlds of science and technology. They read and discuss literature, history, world geography, economics, anthropology, and the organization of human societies. Many areas of study are open-ended, allowing each child to continue pursuing related ideas and personal interests.

Daily lessons build on past learning and respond to the children's expanding knowledge and growing conceptual understanding. As children become more able to reason abstractly, they naturally become independent thinkers. By first using concrete learning materials, children develop both a strong foundation and a deep understanding of concepts, ideas, and skills.

For example, children use the classroom materials in a scientific investigation to describe patterns and define relationships. As they collect information and interpret data, they begin to develop an understanding of independent and dependent variables. When they later study Algebra in the Middle School program, they will extend their earlier science

experiences into multivariate graphing and linear equations. These experiences further extend into causal and statistical reasoning as they research and study a myriad of topics such as health, nutrition, political decisions, and social issues.

During the elementary school years, children do learn without the hands-on materials because they now understand the abstract ideas the materials represent. Abstract ideas should not be merely told; for lasting learning, ideas must be discovered. Academic rules and laws are points of arrival rather than starting points.

Although the scope of the elementary curriculum is vast, it is organized as a spiral curriculum. Students are repeatedly exposed to many subjects that are integrated and connected. With each repetition, children make new discoveries and see connections more clearly. This process enables conceptual formation and deeper understanding, rather than memorizing facts that are quickly forgotten. The integrated curriculum also promotes the development of life-long learning habits such as persistence, reasoning, problem-solving, communication, time-management, and self-reliance.

The following pages outline key topics, concepts and skills that form the E1 curriculum. This Rochester Montessori School curriculum outline is not a complete and final document. It is ever changing as we work to better meet the needs of the children.

Curriculum Area	Lessons, Activities, and Materials	Expectations
Listening and Speaking	<p>Large Group</p> <ul style="list-style-type: none"> ▪ teacher presentations ▪ grace and courtesy ▪ current events and student presentations ▪ class meetings <p>Small Group</p> <ul style="list-style-type: none"> ▪ teacher presentations ▪ projects ▪ sharing assignments 	<p>The child will develop skills in attending and analyzing oral communications.</p> <p>The child will develop fluency in using language to communicate.</p>
Reading	<p>Fiction/non-fiction books</p> <p>Supplemental phonics work</p> <ul style="list-style-type: none"> ▪ beginning, middle and end sounds ▪ long and short vowels ▪ consonant blends ▪ digraphs and diphthongs <p>Sight words</p> <p>Sentence reading</p> <p>Silent sustained reading (SSR)</p> <p>Small discussion groups</p> <p>Paired reading</p> <p>Library skills</p>	<p>The child will develop an appreciation for a variety of literary forms and use word comprehension strategies in a variety of reading situations.</p> <p>The child will develop a variety of decoding and word attack skills.</p>
Writing	<p>Process writing</p> <p>Creative and journal writing</p> <p>Letter writing</p> <p>Main idea</p> <p>Paragraphs</p> <p>Editing</p> <p>Multi-paragraph reports</p> <p>Capitalization and punctuation</p> <p>Montessori materials</p> <ul style="list-style-type: none"> ▪ moveable alphabet 	<p>The child will develop creative and technical skills in writing effectively for a variety of purposes, modes, and audiences.</p>
Spelling	<p>Inventive spelling</p> <p>Dictation</p> <p>Supplemental phonics work</p> <p>ABC order</p> <p>Spelling books and tests</p> <p>Spelling rules</p> <p>Montessori materials</p> <ul style="list-style-type: none"> ▪ moveable alphabet 	<p>The child will develop strategies for spelling words including rules and memorization.</p>
Word Study	<p>Compound words</p> <p>Matching work</p> <ul style="list-style-type: none"> ▪ opposites ▪ animals/sounds ▪ masculine/feminine, etc. <p>Syllables</p>	<p>The child will learn correct expression, how words are built, and increase vocabulary.</p>

Curriculum Area	Lessons, Activities, and Materials	Expectations
Word Study	Prefixes, suffixes and root words Synonyms and antonyms Contractions Dictionary and thesaurus	
Grammar	Function of words Parts of speech Sentence analysis Logical analysis Montessori Materials <ul style="list-style-type: none"> ▪ grammar symbols ▪ sentence analysis charts ▪ literature for grammar 	The child will learn correct expression and increase vocabulary.
Handwriting	Spacing Cursive letters Cursive transcriptions Independent cursive Montessori materials <ul style="list-style-type: none"> ▪ metal insets ▪ moveable alphabet ▪ cursive books (letters and connectors) 	The child will develop fine-motor skills for writing and learn proper formation of letters.
Technology	Keyboarding	The child will develop correct typing techniques on the computer keyboard.
Numbers/Numeration	Odd and even numbers Teen numbers Tens numbers Place value to 1,000,000 Writing and reading small and large numerals Montessori materials <ul style="list-style-type: none"> ▪ teen boards ▪ ten boards ▪ hundred board ▪ bead chains ▪ colored bead bars ▪ golden beads ▪ bank game ▪ hierarchical materials 	The child will develop concepts and skills associated with the understanding of numbers and the decimal system.
Operations	Addition Subtraction Multiplication Division Associative property Distributive property Montessori materials <ul style="list-style-type: none"> ▪ golden beads/Bank game 	The child will develop a deep understanding of the basic operations using numerous concrete materials, working towards abstraction.

Curriculum Area	Lessons, Activities, and Materials	Expectations
Operations	<ul style="list-style-type: none"> ▪ bead chains ▪ bead bars ▪ stamp game ▪ bead frame ▪ addition and subtraction strip-boards ▪ addition and subtraction charts ▪ multiplication board ▪ checkerboard (multiplication) ▪ division board ▪ test tubes (division) ▪ multiplication and division charts 	
Memorization	Addition Subtraction Multiplication Division Montessori materials <ul style="list-style-type: none"> ▪ addition and subtraction strip-boards and charts ▪ bead bars ▪ multiplication board ▪ division board ▪ flash cards ▪ bead chains ▪ binomials ▪ analysis of a square 	The child will work towards memorization of math facts in all operations.
Measurement	Units of money Inch, foot, yard Metric units of measure Time <ul style="list-style-type: none"> ▪ calendars ▪ days, week, months, year ▪ minute, hour, half-hour, quarter hour, etc. ▪ temperature 	The child will develop measurement concepts and skills.
Geometry	Geometry nomenclature <ul style="list-style-type: none"> ▪ 2- and 3-dimensional figures ▪ lines ▪ angles Congruent and equivalent figures Classification of quadrilaterals Montessori materials <ul style="list-style-type: none"> ▪ geometric solids ▪ geometric cabinet ▪ constructive triangle boxes ▪ geometry stick boxes 	The child will develop an understanding of the relationships and applications of geometric shapes through concrete materials.

Curriculum Area	Lessons, Activities, and Materials	Expectations
Fractions	Denominator Numerator Equivalent fractions Mixed fractions Addition and subtraction with like denominators Multiplication with whole numbers Montessori materials <ul style="list-style-type: none"> ▪ fraction insets 	The child will develop a concrete understanding of fractions and their parts, working toward abstraction.
Other	Graphs Charts Estimation Word problems Problem solving	The child will develop skills in solving problems and communicating mathematical ideas.
Geography	Orientation to globe and maps Composition of the Earth Identification of land and water forms Weather Volcanoes Political geography <ul style="list-style-type: none"> ▪ continents ▪ countries ▪ states and cities Flags – parts and history Research of a continent/country Montessori materials <ul style="list-style-type: none"> ▪ puzzle maps and control charts ▪ flag sets ▪ land and water forms/cards ▪ pin maps 	The child will explore the physical and cosmic nature of the Earth.
History	The Great Lessons Creation of the universe Origin of the Earth Year and its parts Geological eras Needs of humans First civilizations Personal timelines Calendars Montessori materials <ul style="list-style-type: none"> ▪ Timeline of Life ▪ Clock of Eras ▪ various historic timelines 	The child will develop an integrated view of the universe and the human place in history.
Botany	5 kingdoms Classification activities External parts of plants	The child will explore and develop an understanding of plants and their parts.

Curriculum Area	Lessons, Activities, and Materials	Expectations
Botany	Botany nomenclature Plant experiments Gardening Montessori materials <ul style="list-style-type: none"> ▪ botany cabinet ▪ leaf shape chart ▪ nomenclature card sets 	
Zoology	Living/Non-living Zoology nomenclature Vertebrate/Invertebrate Research of animals Human body – parts of skeleton External parts of animals Montessori materials <ul style="list-style-type: none"> ▪ classification card sets ▪ nomenclature card sets 	The child will explore and develop an understanding of animals and their parts.
Science	Topics from <ul style="list-style-type: none"> ▪ astronomy ▪ geology ▪ cooking Topics in Math and Science experiments <ul style="list-style-type: none"> ▪ Basic Experiments and hypotheses; critical thinking and problem solving 	The child will develop a basic understanding of science and research.