

Lower Elementary Curriculum (Ages 6 to 9 years)

The Montessori Curriculum is based on the following 5 areas of learning:

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| 1. Language | 3. Science, Social and Cultural Studies | 5. Health and Physical Education |
| 2. Math | 4. The Arts | |

Children are placed in age groups of three years e.g. 6, 7, 8-year-olds work together.



The full curriculum is designed to be completed over a 3-year period.

In keeping with the Montessori philosophy, subjects are offered in an integrated way and the children come to understand how everything they learn is interrelated.

Children work at their own pace. Emphasis is placed on developing strong work habits and responsibility for completing assignments to the best of their ability.

In order to accommodate a multi-age range, and to facilitate children of diverse learning styles, the Montessori curriculum is designed to cover a comprehensive range of interests and abilities.

The learning environment is carefully structured for challenges and success at all levels. The

teacher uses a child's curiosity, imagination and development of social skills as natural motivators for learning.

Younger children are stimulated by the work that their older classmates do, while older children have an opportunity to develop strong leadership skills within the group.

The multi-age classroom provides a sense of stability for the children, who ideally will work with the same teacher for three years.

Learning at the lower elementary level is still based on the use of concrete materials. Children learn through experience and discovery. Gradually, as they work their way through the curriculum, they develop abstract concepts and begin to work more with pen and paper.

1. Language

- The lower elementary language curriculum offers children a carefully structured program of oral, reading and writing skills:
 - Spelling
 - Grammar
 - Vocabulary enrichment
 - Comprehension
 - Sentence analysis
 - Dictionary usage
- These concepts are introduced to the child in the early part of the curriculum. They build on literacy skills that children have already acquired in the early childhood program.
- A whole language approach to reading is encouraged. This allows children to follow their own interests in learning e.g. one child will want to know and write about dinosaurs while another will explore and record the qualities of magnets.



- Emphasis is placed on the development of excellent writing skills. The children write everyday and on many topics. The conventions of written language: punctuation, capitalization, spelling and sentence structure are taught as specific lessons and then applied to the child's own work.

- Strong research skills develop as the child learns where and how to locate information, and how to classify and organize it appropriately.

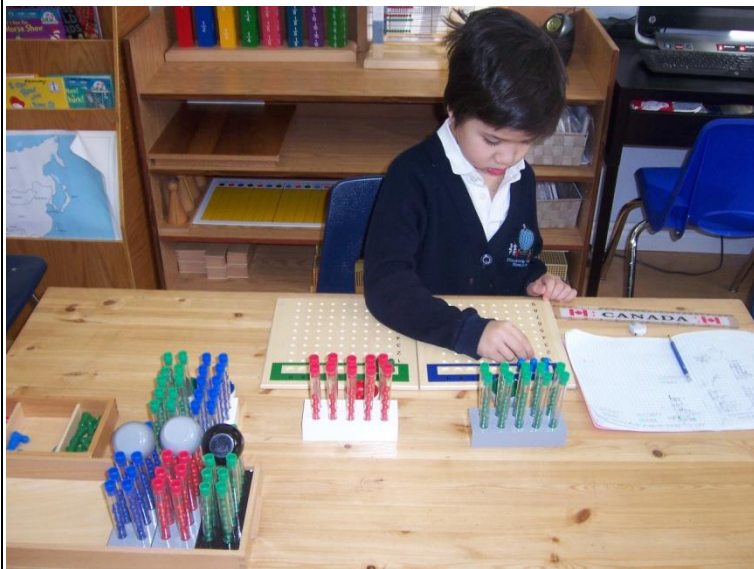
These skills are applied to the study of subjects across the curriculum. The child discovers that knowledge in one area may

also be related to other areas. For example, the study of early life on earth will move from prehistory, to botany, climate and math; throughout this learning experience the child's oral and written language skills will improve.

- Creative writing in all its forms: stories, poetry, journals and drama is nourished and valued in the Montessori classroom. The lower elementary child takes exceptional pleasure in playing with words. Unusual words, long words, precise words, are a fascination for 6 to 9 year olds. Their capacity for enrichment is limitless at this age and is evident in the amount of writing they choose to do during the course of a day.
- Oral language skills are strengthened by encouraging children to present their projects and read their stories with confidence, clarity and expression.
- Good literature is always available in the classroom and the school library. The children enjoy reading well-written story and information books in all subject areas across the curriculum.
- On completion of the lower elementary language curriculum the child is expected to read fluently and understand simple chapter and information books. They are also expected to gather and organize information from a variety of sources, use the conventions of writing accurately and make clear oral presentations to the class.



2. Math



The Montessori lower elementary math curriculum is based on learning through experience. Children use a wide variety of carefully constructed materials to lead them to an understanding of mathematical operations and concepts. A systematic series of activities and exercises help the child to discover what it really means to add numbers together, divide a whole into many equal parts, and recognize similarities and equivalencies in two- and three-dimensional shapes.

Gradually the child moves from concrete to symbolic math, and eventually enjoys and understands abstract math at an advanced level.

Children in a lower elementary classroom are

explorers. They thrive on every opportunity to discover the laws of their environment. Mathematical laws fascinate them. They are excited by large amounts up to 1,000,000 and explore their values, sequence and rules. Because the materials promote discovery, children frequently identify math as a favourite subject in school.

Over the three-year period children will:



- Work with the four operations: addition, multiplication, subtraction and division using whole numbers, decimals and fractions.
- Explore the rules for factors and multiples.
- Build square numbers on bases 1 to 10.
- Memorize number facts by skip counting by 2, 3, 4, up to 10.
- Read data in pictograph, bar graph, circle graph forms.
- Use one- to- many correspondence e.g. one tree represents 1,000 trees.
- Estimate length, capacity and mass using non-standard and standard units of measure.

Measure time and temperature using standard units of measure.

Investigate and identify all geometric solids.

Identify, measure and construct (using appropriate geometric instruments) angles, triangles, quadrilaterals, polygons and circles.

Demonstrate equivalency, congruency, symmetry and similarity.

Read, write and spell all mathematical vocabulary used in the 6 to 9 curriculum.

Read and write mathematical symbols for concepts e.g. $<$, $>$, $=$, $+$ etc.

Apply math skills to daily activities e.g. baking, weather charts, woodwork, map-making, budgeting.

The math curriculum is designed to meet all academic learning styles and abilities. The child who requires additional time to fully understand a concept will have that time. Children, who grasp the concept quickly and are ready for more challenging work, will move on to new challenges. No child is expected to progress at someone else's pace. Emphasis is always placed on achieving one's personal best.

Multi-age groups offer a flexible time frame for reaching academic goals.

3. Science, Social and Cultural Curriculum



The science, social and cultural curriculum is seen as the backbone of the lower elementary classroom. Basic skills in literacy and numeracy are taught in order to make the works of culture available to the child. The integrated (cosmic) curriculum explores history, geography, science, anthropology, commerce, literature, the arts, and music. Children learn through the exploration of key timelines and classification charts, impressionistic lessons and experiments. They are encouraged to research subjects of particular interest to themselves. There is no limit to the range of projects that can be undertaken, and each child works at their own pace.

4. History



History is introduced through the use of large time-lines that give children a visual impression of pre-historic life, the world of early people on earth and the emergence of some of the first civilizations: Sumerians, Babylonians.

- The children explore many different myths of creation that contribute to our present understanding of the origins of Earth.
 - Key lessons are used to present the history of emerging languages and numeracy in early civilizations.
 - Fundamental needs of people through the ages, and how these were satisfied, are examined in detail.
 - Causes and means of migration are explored.
- The histories of shelter, travel, clothing,

defence, arts, are traced through time.

The life styles of the first people in Canada are explored and compared.

Early European settlers are identified, and their trade routes charted.

5. Geography

Geography materials illustrate the birth of planet Earth, its place in the universe, and how it contributed to the history of humankind.



- The curriculum begins with the creation of the Universe, Solar System and the evolution of Earth.

- The children study land and water forms, composition of the Earth and the scientific laws that govern the Solar System and Continents.

- They learn about rivers, lakes, mountains, deserts and wealth of natural resources.

- They investigate land, air and water phenomena: volcanoes, earthquakes, tornadoes, and tidal waves.

- They record weather conditions and study their impact on people and the

environment.

They identify and classify rocks.

They read and create their own maps using scales and legends.

They use graphs and charts to record information.

They learn the names, locations and capitals of countries and continents.

They learn the names, locations, capitals and flags of the provinces and territories of Canada.

6. Science

Science experiments help the child to understand the laws of the Universe. Their curriculum covers:



- Rotation of the Earth
- Night and day and the seasons
- Friction
- Gravity
- Water cycle
- Mineral and energy sources
- Plant and animal needs and life cycles
- Interdependence of species
- Outdoor environment is used to plant flowers and vegetables
- Examine trees, wild flowers, animal tracks

- Identify and classify types of soil and rocks
- Experiment with various growing conditions
- Test pollution levels in snow
- Measure rainfall

7. Social



The Social curriculum recognizes the child's early interest in an ethical value system and social rules in the community.

- Children are given strategies for consulting and collaborating with others.
- They learn conflict resolution skills.
- They learn respect for individual differences.
- The child learns shared responsibility.
- Children develop awareness of the unique contribution that every person makes to the community and environment.

The lower elementary Montessori curriculum lays the foundation for further growth and understanding. The child moves from a carefully structured environment to one that they will construct for themselves with the understanding that they have developed between the ages of 6 to 9 years



8. Biology



Plants and animals are an essential part of the elementary environment and as children observe and care for these living things, they acquire the experiential basis for their future understanding of biology. They

extend their knowledge by going out to wildlife sanctuaries, arboretums, and nature parks. They read, "Who am I" stories about the lives and characteristics of plants and animals. They examine different specimens of vertebrates and invertebrates. They perform plant experiments that demonstrate basic functions of each part of a plant.

In the biology curriculum, children use classroom resources, books, card materials, and charts in their studies. They write reports and out of the comparative studies of life forms, they also see and appreciate the interdependence of all things in the universe.

9. The Arts



Art is integrated in all areas of the Montessori curriculum. In Language, children illustrate their written words. They are introduced to various forms of poetry. Geometry teaches shapes and creative designs. Music concerts give children opportunities for music listening and appreciation, dramatizing, vocalizing and dancing. Engaging projects encourage personal expression while students learn about art history and a sense of other cultures. In addition, field trips to see musical concerts, dance performances, and other cultural venues expand their knowledge and curriculum learning.

During French classes, children develop fundamental vocabulary and language structures for effective oral communication with an emphasis on listening and speaking. Reading and writing is also emphasized, along with the discovery of the culture of the French language.



10. Health and Physical Education

Off-site physical education activities familiarize children with what the surrounding community offers.



Children experience enjoyment as they learn goal setting, discipline and physical skills. As well, they learn social skills such as working with others, fairness, team play, sportsmanship and leadership. These experiences create a lifelong interest in physical activity, health and fitness in each child's life. On a daily basis, children participate in activities during recess to promote active living. Integrating healthy eating and physical activities into a child's everyday routine is a great way to

encouraging enthusiasm for an active lifestyle.

