

Upper Elementary Curriculum Ages 9 through 12 years

Dr. Montessori recognized the interconnectedness of all things and founded the Elementary program on the principle of "Cosmic Education." The integrated curriculum is designed to spark the interest of the child in knowledge, to nourish the child's creativity, and to inspire the child's discovery of the world.

The Cultural area integrates geography, history, cultural studies, and science. Study of these subjects establishes an awareness of the history of life, how things came to be, how the earth functions, and how humans meet their fundamental needs. The activities are designed to develop a clear sense of time and to present the story of the universe and human civilization. The big picture is presented through impressionistic stories that stimulate the child's interest and imagination. The student's mind is opened to an understanding of the world, to the effect that plants and animals have had on the world, and to an awareness of how humans transformed the world.

Geography and History are linked through the lessons of customs, housing, food, government, industry, the arts, clothing and defense throughout human history. Studies in physical geography begin with the formation of the earth and delve into aspects of earth topography as a geographical influence on developing civilizations. History is the exploration and appreciation of the past and shows the child the greatness of humans and their role in the evolution of cultures. It is through the study of different cultures that we learn not only what is different between cultures, but ultimately what unites us as global citizens.

The Science curriculum includes biology, zoology, chemistry, physics, geology, and astronomy. Our goal is to cultivate the child's fascination with the universe through materials that are designed to stimulate the children's curiosity and encourage their determination to discover the facts for themselves. Students are encouraged to observe, analyze, measure, classify, experiment, and predict. The science curriculum fosters a clear-thinking approach to gathering information and problem solving.

Language is a tool of one's culture, a system of communication, and an expression of the individual person. The child explores the reasoning underlying the facts of language, the origins and the development of language. They come to understand and appreciate the power of language to communicate the present and the past, and to project to the future. Reading, writing, and all aspects of grammar are interrelated throughout the elementary curriculum.

The goal for the area of Mathematics is the development of mathematical thinking skills. The Montessori math materials provide opportunities to develop precise and logical thought patterns, and the hands-on materials make abstract concepts concrete. Core math skills functions are mastered and the students internalize the concepts of those processes, handling whole and fractional numbers into the millions. Our elementary students develop a sound foundation in mathematics and geometry.

The Arts are incorporated in the entire curriculum. Creative expression is one of the modes for exploring and expanding lessons in geography, history, science, language arts, and mathematics.

The integration of all the areas of the elementary curriculum helps further develop each child's social, intellectual, emotional, and organizational habits. Through discovery, exploration, repetition, and determination, each child at The Montessori Academy at Edison Lakes strives to become a life-long learner.

Curriculum Outline

LANGUAGE ARTS

Great Lesson: The Story of Writing

- Word Study: Origins of words and word families
- Grammar: Classification of parts of speech
- Sentence Analysis, Punctuation and Spelling Rules
- Reference Materials
- Spoken Language: Oral reports, poetry readings, reading books, debates, drama
- Written Language/Penmanship: Writing structures, types of writing, creative expression
- Reading Skills: Comprehension skills; literature groups; accelerated reader library program

MATHEMATICS

Great Lesson: The Story of Numerals

- Math Concepts: Commutative and distributive properties; factoring, prime numbers
- Memorization of basic math facts and timed tests
- Operations/Computations: Whole and fraction number operations; word problems; decimal operations
- Measurement
- Squaring and Cubing / Powers of Numbers: Square root/cube root; signed numbers
- Problem Solving and introduction to balancing equations and to solving unknown variables

Geometry

- Basic definitions; Pythagorean theorem; Advance line and angles study; study of perimeter, area, volume and solid geometry; introduction to formulas

CULTURAL SUBJECTS

Great Lessons: Coming of the Universe, Timeline of Life, Coming of Humans, Experiments

History:

- Time line of life; time measurement; time line of man; fundamental needs of humans
- Accomplishments of humans throughout history
- Indiana History
- New World Civilizations and American History

American Government:

- Introduction to American government systems and origins; Three branches of government; How a bill becomes a law

Asia and South America:

- Geography of continents and cultures; immigration; study of trade and economy; cultural impact

GEOGRAPHY

- Physical Geography: Components of the earth's surface including water and atmosphere; biomes
- Geography Mapping: Countries; types of maps; compass use and coordinates
- Economic Geography: Concept of taxation; natural resources; global production and consumption; concept of world economy and interdependency

SCIENCE

- The Universe / Solar System
- Physical Science and earth science; geology nomenclature
- Life Science: Botany and zoology, human anatomy
- Chemistry: Introduction to the elements, parts of atoms, compounds and the periodic table