Montessori Early Learning Center & School of the Arts

Upper Elementary Curriculum

- Language Arts
- Mathematics
- Science
- U.S. History & Geography
- Technology
- The Arts
- Performing Arts
- Physical Education
- Spanish
- Latin

<u>Language Arts:</u> The Language Arts curriculum in Upper Elementary emphasizes language as an art of communication. Over the three-year cycle, students become proficient readers, writers, speakers, editors, authors, critics, and poets. They learn and practice essential skills in grammar, punctuation and expression in a range of contexts, including small and large group lessons, independent work, writing prompts, journal writing, research projects, oral presentations, portfolio reflections and literature analyses.

<u>Mathematics:</u> The Upper Elementary math curriculum emphasizes the relationship of math to everyday life and problem solving. Students' need for manipulative materials decreases as they learn to internalize abstract concepts that students use in their future studies of algebra, geometry, calculus, statistics and trigonometry. The geometry curriculum expands students' working knowledge of geometry in nature and design, using formulas, theorems and proofs.

Division

- ❖ Mastery of division facts > single-digit division > multiple-digit division
- Rounding numbers and estimating quotients

Fractions

- Review of common multiples and factors
- ❖ Fractions and equivalence > simplest form > comparing and ordering fractions
- Addition and subtraction with like denominators > addition and subtraction with unlike denominators > multiplication and division of fractions > multiplication and division of mixed numbers

Decimals

- Decimal place value > ordering and comparing decimals > estimating and rounding decimals
- ❖ Addition > subtractions > multiplication > division of decimals

Ratio, Proportion and Probability

Equivalence > rate > ratios to solve proportions > predicting > diagramming > interpreting fairness

Percent

Estimating percent > relationship between percents, fractions and decimals > calculating percent, discount and interest

Pre-Algebra, Integers and the Coordinate Plane

❖ Numbers less than zero > comparing and ordering integers > integer operations > order of operations > coordinate plane > writing equations > evaluation expressions

Graphing, Statistics, and Data Analysis

❖ Collecting, organizing and interpreting data > mean, range, more, medium > graphing data

Measurement and Geometry

- ❖ Naming polygons > slides, flips, turns and symmetry > ordered pairs > point lines, angles and planes
- ❖ Systems of measurement > length, area > perimeter, volume and circumference

<u>Science:</u> Upper Elementary students approach their scientific investigations as authentic scientists, hypothesizing, testing ideas and documenting their conclusions. Students explore the scientific world using the inquiry method. Units in earth science, biology, physics and chemistry are incorporated into their thematic studies. Among the topic investigated are plants and animals, heredity, ecology and classification.

<u>History and Geography:</u> Young people developing awareness of their abilities to affect the directions of their lives will take inform History, culture and geography studies. Students begin to think more abstractly and are guided to engage in comparative analysis as they study history and contemporary society. We incorporate geography into cultural studies. Students learn, compare and contrast the themes of geography that impact societies' growth and development, including location, place, the interactions of people and environments, movement and regions. Throughout their studies, students investigate the fundamental themes of social studies and being U.S. History at age 9-10:

- Culture
- Time, continuity and change
- People, places and environments
- ❖ Individual development and identity
- Individuals, groups and institutions
- Power, authority and governance
- Production, distribution and consumption
- Science, technology and society
- Global connections
- Civic ideals and practices

<u>Technology:</u> Technology complements the curriculum by providing alternative ways of exploring, completing and presenting work. Technology skills are applied in subject-matter learning, enabling students to acquire expertise in context. Students master problem solving, choosing tools most appropriate for accomplishing a task efficiently, online research, synthesis and presentation skills through the Upper Elementary years.

<u>The Arts:</u> Art is a language that comes naturally to children, and the language of art is spoken at MELC from Early Childhood through the Upper Elementary years. The Arts at MELC provide children with rich and varied experiences. Lessons are designed to teach children a discreet set of artistic principles and techniques, and also to allow students to connect their lives as artists to their classroom themes and projects. A wide variety of arts classes are also offered as private classes in special interest areas.

Arts

- ❖ Visual Fall & Summer/Variety of Mediums
- Dance History

- Art History
- Music
 - o Chorus
 - Music History

<u>Performing Arts:</u> The MELC performing arts school takes a hands-on approach to learning. Students work to foster an understanding and appreciation of the arts and an emphasis is placed on making connections among music, dance, drama, visual arts, and emotion. Students are encouraged to share their musical and dramatic endeavors during recitals and various other performance opportunities throughout the year.

<u>Physical Education:</u> We encourage a love of physical learning and discovery. Our physical education program uses state-of-the-art facilities to develop lifelong skills of fitness. Continuing in the Upper Elementary years, children participate in summer swimming programs and year round soccer. Children also have daily free time on our 3 ½ acre well-equipped playground.

<u>Spanish:</u> Language proficiency is a tool for communicating and cultivating connections. Spanish is taught at MELC beginning at the 6-9 level and continuing through the Upper Elementary grades.

Studies show that children who begin a second language at an early age achieve a high degree of proficiency, gain a better understanding of the English language, improve their overall performance, become more flexible thinkers, use critical thinking skills effectively, and display a better understanding and appreciation of cultural differences and social interactions.

<u>Latin:</u> Latin is offered at Lower and Upper Elementary levels by invitation, depending on the level of mechanics of English