

	Lower Elementary	Upper Elementary
	Language and history are abstract areas of study, in which we rely on the Elementary child's power of imagination by presenting them with stories, impressionistic charts, and timelines.	Reading is central to the culture and work of this age group.  Writing is integrated into all areas of learning and children write to express themselves and share their ideas.
	<ul> <li>History of Language</li> <li>History of spoken and written language</li> <li>Language Families</li> <li>Etymology of English words</li> </ul>	History of Writing  • Etymology  • History of written language
	<ul> <li>Evolution of writing</li> <li>Grammar</li> <li>Parts of speech</li> </ul>	Grammar  Parts of Speech  Sentence Analysis
Language	<ul> <li>Sentence organization and style</li> <li>Word Study</li> </ul>	Reading
	Reading	character development  Asking questions about the text  Citing evidence  Evaluating information sources
	<ul> <li>Comprehension</li> <li>Classic and contemporary literature and poetry</li> <li>Writing Mechanics</li> <li>Cursive</li> </ul>	Writing Mechanics  • Handwriting - cursive and print  • Spelling  • Punctuation & Capitalization  • Sentence, paragraph, and essay formation
	<ul><li>Types of lettering</li><li>Spelling</li><li>Punctuation &amp; Capitalization</li></ul>	Writing genres  Opinion & Persuasive writing



• Sentence and paragraph formation

### Writing genres

- Creative writing
- Opinion writing
- Research methods using various media, reference books, and computers

### Speaking

- Making announcements
- Public speaking and presentations of work

## Narrative writing

- Creative writing
- Research reports & Expository writing
- Speeches & Presentations
- Summary
- Poetry
- Book reflection

#### Speaking

- Making announcements
- Explaining an idea clearly and succinctly
- Delivering presentations
- Acting
- Debating

Language (cont.)



	Lower Elementary	Upper Elementary
History	Children are exposed to history right away when they enter Elementary. Through the Great Lessons, they hear about the evolutionary process. They are told stories about how humans came to be and how through working together they have accomplished the achievements that have brought us to where we are today.  History  Study of plant and animal life coming to Earth Coming of humans and the formation of civilizations History of spoken and written language Physical and spiritual needs of people Closer examination of ancient civilizations River Civilizations  Time  Telling Time BCE - CE Timeline Comparative time of the universe, Earth, humans, and recorded history Personal and familial timeline and research	History is explored from the perspective of asking questions about how humans have met their fundamental needs over time and place. Visual timelines are an important part of history studies. Students also choose additional history topics, not listed here, that are of interest to them.  History  Early humans River and ancient civilizations: Mesopotamia, Egypt, China, Indus Valley, Ancient Greece and Rome Development of writing and numbers Government & early law systems Japanese History  Social Science Geographical factors influence the development of regions Types of government Government systems of Japan and other home countries Basic economic concepts Migration, immigration & refugees
	Personal and familial timeline and research	· ·



	Lower Elementary	Upper Elementary
Math	For math and geometry, children build a strong understanding of math concepts through repetition with hands-on materials. Through work with the materials, children experience the process and internalize it, and abstract it for themselves.  Operations with 4-digit equations	Montessori materials are the foundation for new concepts and provide a continuation of the work of Lower Elementary. Children at this age are progressing more and more toward working abstractly on paper. Word problems are used for all math concepts and provide a connection to real-world applications of math.  Multiples & Factors
	Word problems  Rules for divisibility  Multiples and Factors  • Common multiples of number	Percentage
	Finding factors	Number concepts



#### Measurement

- Length
- Area

#### Graphing

- Interpreting bar and pictographs
- Creating bar graphs

- Powers of numbers
- Signed Numbers + x ÷
- Ratio & proportion, scale drawing
- Scientific Notation
- Numbers with different bases

#### Measurement

 Length, Area, Volume, and Mass using the metric system

### **Graphing & Statistics**

- Interpreting bar, line, pie graphs
- Creating bar, line, pie graphs
- Finding mean, median, mode and range of a data set

### Pre-Algebra

- Evaluating an equation to find the missing value
- Writing an algebraic expression



	Lower Elementary	Upper Elementary
Geometry	Congruency, similarity, and equivalence work lays the foundation for all the geometry work.  Congruency, Similarity, and Equivalence Polygons: types and classification Angles: types, classification, measuring, and four operations Lines: types and classification Geometric solids: types, edges, faces, vertices Symmetry Perimeter and area of rectangles	Geometry lessons are integrated with math, science, and also history. Greek and Latin root words are emphasized throughout.  Shapes  Identifying 2D shapes Igentifying 3D shapes Identifying 3D shapes Counting edges, faces, vertices Types of symmetry  Angles Improved the missing angle based on other information  Spatial relationships Area & perimeter of triangles, quadrilaterals and regular polygons Volume of geometric solids Coordinate plane (x,y) Geometric constructions with a compass Pythagorean Theorem



	Lower Elementary	Upper Elementary
Sciences	Science in the Montessori classroom is categorized into two areas—Geography and Biology.  Geography Maria Montessori used the term "geography" to encompass all studies relating to the earth, and in this sense it is the core of the Elementary studies. Geography, in Montessori, can be defined as geology, astronomy, chemistry, physics, and human geography.  Creation of the Universe Laws of the Universe; gravity, states of matter, solutions and mixtures Earth Science Relationship between the Earth and the Sun Composition of the Earth Types of rocks Atmosphere Hydrosphere and the water cycle Physical and Political Geography with map work Country Study - maps, flags, physical features Economic Geography  Biology Biology is split into two areas—Botany and Zoology. Throughout a child's work in Biology and Geography, they will conduct many experiments and work with real tools and samples.  Study of prehistoric animals and the evolution of animal life Invertebrates and vertebrates Body functions of animals Classification of life	Geography  Earth Science & Astronomy  Plate tectonics, earthquakes & volcanoes  Erosion  Cycles: Water, Rock, Carbon  Weather & Climate  Layers of the atmosphere  Sun & Earth: lunar & solar eclipse, equinox, seasons  Stars & planets  Chemistry  Physical change vs. chemical change  Acids & bases  Atoms, molecules & the Periodic Table  Solutions & crystals  Physics  Simple machines  Laws of Motion  Electricity



<ul> <li>Photosynthesis and how plants meet their needs</li> <li>Plant parts and their functions</li> <li>Ecosystems and biomes of the world</li> <li>Interdependence of living organisms</li> <li>Research into preservation of natural environment</li> </ul>	Biology  Classification of life Biomes & Ecosystems Plants & photosynthesis Human body systems



Japanese language lessons are offered at a range of levels that address the needs of native and non-native speakers.

#### Non-native speakers

- Greetings and conversations
- Vocabulary
- Cultural events and crafts
- Japanese songs
- Reading in Japanese Hiragana, Katakana, and Kanji
- Writing in Japanese Hiragana, Katakana, and Kanji
- Japanese geography
- Japanese history

## Native speakers

**Japanese** 

- Writing in Japanese Hiragana, Katakana, and Kanji
- Writing sentences and paragraphs
- Vocabulary, proverbs, and idioms
- Proper speech
- Reading
- Cultural events and crafts
- Japanese songs
- Japanese history
- Japanese geography

Japanese language lessons are offered weekly at a range of levels that address the needs of native and non-native speakers. Japanese linguistic and cultural knowledge are considered Practical Life skills since they are needed by students in their lives outside of school. Native and non-native groups collaborate for projects, presentations, skits, and special events.

#### Non-native speakers

- Greetings and essential phrases
- Vocabulary
- Grammar and sentence patterns
- Essential conversation for living in Japan
- Cultural events and crafts
- Japanese songs
- Reading in Japanese Hiragana, Katakana, and Kanji
- Writing in Japanese Hiragana, Katakana, and Kanji
- Japanese geography and history

## Native speakers

- Reading: Comprehension of various genres of text
- Kanji: strokes order, readings, origin
- Writing structures
- History, geography and social studies
- Culture, art, cuisine, agriculture, and topics of interest
- Discussions & Presentations



Art is presented to the child as an avenue for self-expression and is integrated into all areas of learning. Drawing something that one observes fine tunes the senses and helps the child integrate thoughts into visual form.

## **Art Exploration**

- Recognize that there are many different kinds of artists: painters, sculptures, architects and more
- Develop an understanding that almost any material can be art media
- See art as man's story of history and explore cultural heritage such as the cave paintings of Lascaux, the Sistine Chapel, or the American flag
- Become familiar with the personal expressions of artists past and present

#### Media Techniques

- Explore drawing and painting (landscape, seascape, still life, portraiture and abstract)
- Create original work through printmaking, sculpture, puppetry, textile arts, and crafts

Art is presented to the child as an avenue for self-expression. Drawing something that one observes fine tunes the senses and helps the child integrate thoughts into visual form.

Elements: Identifying and employing: line, shape, form, space, perspective, value, texture, and color

Principles of Design: Identifying and employing: emphasis, balance, contrast, movement, rhythm, pattern, harmony and variety, unity, and composition

#### Media techniques

- Drawing & sketching with various pencils and charcoal
- Painting with watercolors, tempera, and acrylic
- Molding with clay
- Print-making
- Mixed-media sculpture

#### **Art History**

- Integration into all areas of study–language, geometry, science, math, history
- History of the various colors
- Projects connected to significant artists, styles, and art movements

Art



### Singing

- Solfeggio (Do-Re-Mi, recognizing hand signs)
- Song Repertoire
  - Traditional Folk songs
  - Popular children songs

#### Music Appreciation

- Instruments of the orchestra
- Famous classical composers
- Emphasis on classical music composed for children

#### Rhythm

- Playing rhythm with percussion instruments
  - whole/half/quarter/eighth notes
- Eurhythmics
  - Reacting to sounds and rhythmic patterns
  - Sensing rhythm

### Instrument lessons in small groups

- Piano
  - Major scales
  - o Basic triads and accompaniment
- Guitar & Ukulele
  - Major scale
  - Basic open chords and accompaniment
- Drums
  - Basic groove (hi-hat, bass drum, snare drum)
  - Basic fill ins
  - Drum rudiments (single stroke roll, flam)

## Singing

Vocal exercises

#### Music Appreciation

- Classical and modern genres
- Attending a live concert

## Rhythm and Music Theory

Basic scales and chords

### Instrument lessons in small groups

- Piano
  - major/minor triads and chord inversions
  - left/right hand comping
- Guitar
  - Open chords and barre chords
  - Right hand 8th note patterns
- Ukulele
  - Open chords and variant chords
  - Right hand 8th note patterns
- Drums
  - Intermediate grooves
  - Fill-ins with 8th notes and 16th notes

#### Band

- Singing: Deepening of vocal exercises and song repertoire
- Instrumental: Accompaniment for songs
- Combining singing with playing instruments in a group
- Live Performances and Projects
  - o Concerts, music videos, audio recordings



Teamwork, cooperation, and sportsmanship are woven throughout all physical activities.

Movement

- Tag games
- Agility ladder footwork drills
- Relay Races

Throwing and Catching

- Bean Bags throwing and catching, juggling with multiple objects
- Scoops throwing and catching
- Dodgeball
- Basketball

**Gymnastics** 

**Physical** 

Education

- Mat activities
- Balances
- Jump rope

Kicking and Striking

- Badminton
- Soccer
- Floor Hockey
- Volleyball

Teamwork, cooperation, and sportsmanship are woven throughout all physical activities.

#### Movement

- Tag games with equipment
- Agility ladder footwork drills
- Relay Races

Throwing and Catching

- Bean Bags juggling
- Scoops
- Dodgeball
- Basketball

**Fitness** 

- Shuttle Run
- Long distance running
- Jump rope
- Cooperative games

Kicking and Striking

- Badminton
- Soccer
- Floor Hockey
- Volleyball



Grace and Courtesy lessons and classroom tasks provide a basis for Practical Life skills.

#### Care of Self

- Personal hygiene
- Safety at school
- Road safety while walking to the park

#### Care of the Environment

- Classroom jobs cleaning, laundry, organizing the space, plant care
- Keeping their belongings neat and organized
- Repairing damaged material

#### Handwork

- Knitting, Finger-knitting, Crochet
- Sewing, Embroidery

#### Time Management

- Planning activities
- Recording work in journals

#### Going Out

- Planning the visit, calculating the cost
- Following safety protocols

These skills are acquired naturally through participation in our classroom environment through hands-on work.

#### Care of Self

- Personal hygiene for changing bodies
- Road safety

## Care of the Community

- Planning and managing activities in the classroom
- Class governance and conflict resolution

#### Care of the Environment

- Plant care, gardening & composting
- Cleaning the environment, doing laundry
- Repairing furniture and materials

### Handwork & Cooking

- Knitting, crocheting, finger-knitting, embroidery
- Cooking recipe choice, shopping, kitchen use

## Time Management

- Recording work in journals
- Setting goals and planning ahead
- Coordinating schedules

#### Going Out

- Planning public transit routes
- Making arrangements and calculating costs
- Coordinating with adults and peers

# Practical Life



Social & Emotional Develop-ment	Lower Elementary students have a growing interest in socialization and welcome opportunities to learn from their peers.  Cooperation Compassion and respect for others Polite conversation - saying 'please', 'thank you', 'excuse me' Group etiquette Conflict resolution Helpful attitude Following directions Self-motivation Awareness of surroundings and others in the area Sharing and listening to opinions Leadership	Participating in the class community and using one's time well are important aspects of the Upper El student's work.  Cooperation, teamwork Compassion and respect for others Following directions Self-motivation Managing one's time and work effectively Self-discipline and Self-control Awareness of surroundings and others in the area Sharing and listening to opinions Taking turns in a discussion Leadership Recognizing a need and taking action
Technology	Word Processing  Use of a mouse Typing practice Use of the keyboard - capitalization other signs Formatting a document Internet How to use a search engine	Word Processing