MIDDLE SCHOOL CURRICULUM

The LMS Middle School enables students to stretch themselves and take academic risks as they work in a close community of peers and adults.

Educators proclaim that the ideal school for early adolescents provides a feeling of safety, a sense of community, and a close working relationship with adults. The LMS Middle School provides such a place, where students can stretch themselves, take academic risks, and learn about themselves as older students and blossoming young adults. Our capstone class creates a safe but challenging environment by extending Montessori philosophy to older students. Intimate in size, this class offers young adolescents extraordinary mentorship by experienced, caring adults.

LMS teachers engage their adolescent students in stimulating discussion seminars that integrate literature with complex investigations of social themes such as origins, change, quest, structure, and power. Students practice a host of writing skills utilizing different literary techniques.

The math curricula build upon Montessori math materials used in earlier years. On that firm foundation, the Middle School students move to textbooks, pencil, and paper to work with pre-algebra and algebra. The sciences provide students both laboratory and field investigations in earth science, physical science and life science. Using the scientific method, our students explore science and discover concepts through hands-on experiments.
MIDDLE SCHOOL CURRICULUM

Language

Expressive and Receptive Language

Comprehension and Collaboration

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on various topics, texts, and issues, building on others’ ideas and expressing their own clearly.
   a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
   b. Follow agreed-upon rules for collegial discussions and decision making, track progress toward specific goals or deadlines, and define individual roles as needed.
   c. Pose questions that connect the ideas of several speakers and respond to others questions and comments with relevant evidence, observations and ideas.
   d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

   **Activity Example:** Students read a variety of articles, essays, and fictional stories about Puerto Rico’s history and current political situation. They discuss and eventually debate the issue, drawing on the texts for support and using them as a basis for discussion.

2. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

   **Activity Example:** During an advertising unit, students analyze print and multimedia ads, identify rhetorical appeals in each, and create their own ads based upon those principles.

3. Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.

   **Activity Example:** During units on “The Moth” and “This I Believe,” students will identify the speaker’s central argument or theme and analyze strong supporting details as well as off-topic or supplementary information, either in the form of support or of a tangential story.

Presentation

4. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
Activity Example: Students debate Puerto Rico’s political status after reading a variety of articles, essays, and short stories as evidence. Students also study a public speaking unit, during which they give three speeches: informational, persuasive, and functional.

5. Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.

Activity Example: During a public speaking unit, students use a slideshow software as well as physical and interactive materials to enhance their presentation and provide support for their more salient points.

6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 8 Language standards 1 and 3 on page 53 for specific expectations.)

Activity Example: During public speaking unit, students use formal language for informational and persuasive speeches, while using more engaging, colloquial language for the functional speech, since audience members will be following along with an interactive presentation.

Conventions and Grammar

7. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
   a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.
   b. Form and use verbs in the active and passive voice.
   c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
   d. Explain the function of phrases and clauses in general and their function in specific sentences.
   e. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.
   f. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.
   g. Recognize and correct inappropriate shifts in verb voice and mood.

Activity example: During the editing process of their creative short stories, students rewrite passages from passive to active voice. Students complete regular grammar exercises both in class and for homework.

8. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
   a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.
   b. Use an ellipsis to indicate an omission.
c. Spell correctly.

**Activity example:** Students use ellipses in quotations during academic essays and op-ed pieces. Frequent peer- and self-editing makes use of students’ knowledge of punctuation and gives them practice editing for sentence fluency, one of the Six Traits of Writing.

9. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
   
a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

**Activity example:** In creative writing, students use passive voice to focus the attention on an item rather than the actor. Students complete regular grammar exercises both in class and for homework.

**Vocabulary**

10. Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on appropriate reading level and content, choosing flexibly from a range of strategies.
   
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.

b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).

c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.

d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

**Activity example:** Students complete weekly Latin root word vocabulary, identifying roots, prefixes and suffixes, and learning new vocabulary words. They use these new words in context by writing sentences and by forming new words using roots, prefixes, and suffixes as interchangeable parts.

11. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
   
a. Interpret figures of speech (e.g. verbal irony, puns) in context.

b. Use the relationship between particular words to better understand each of the words.

c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).
Activity example: Students write personal narratives in the form of The Moth-style stories, in which they have to revise for specific word choice and figurative language in order to make a point that will entertain an audience and show a clever turn of phrase.

12. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Activity example: Students use transition words in essays, marker verbs in persuasive and analytical pieces, and start learning SAT-level vocabulary once they work through the self-paced Latin root word units.

Reading

Key Ideas and Details

13. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

Activity Example: Fiction and Informational: Students write multiple analytical essays and paragraphs based on short stories, novels, novellas, and non-fiction books, citing textual evidence in MLA style that supports themes in the text.

14. Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.

Activity Example (Fiction): Students fill out literary analysis forms, analyzing themes, motifs, and symbolism in fiction texts, and noting which characters, items, places, and events serve to reinforce those elements.

Activity Example (Informational): Students fill out comprehensive reading guides for a non-fiction book, analyzing author’s purpose and tone and citing textual evidence in support.

15. Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. Analyze how an informational text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).

Activity Example (Fiction): Students identify key lines of narration and dialogue in prose and poetry that foreshadow future action, that describe a character (character’s actions, character’s speech, character’s thoughts, other characters’ speech about that character).

Activity Example (Informational): After reading examples in informational text, they learn to write metaphors for statistics, comparing a certain number of acres to a certain number of football fields, or a certain number of dollars to a certain number of Harvard tuitions, etc. in their own expository writing.
Craft and Structure

16. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

Activity Example (Fiction): Fiction: Students analyze poetry with graphic organizers, determining the meaning of figurative language and other wordplay. While reading Poe and science fiction, students analyze the use of word choice on mood and tone.

Activity Example (Informational): Students identify evidence of bias in text by analyzing marker verbs such as “claims, purports, denies,” etc. and subjective language such as “apparently.”

17. Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style. Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.

Activity Example: (Fiction and Informational): Students read examples of text structure in non-fiction and fiction prose and determine the effect of chapter titles, alternating narration, one-word paragraphs, etc. on meaning.

18. Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor. Determine an author’s point of view or purpose in an informational text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Activity Example (Fiction): Students read narrative stories from different points of view and compare the differences in style and how those differences communicate meaning. They also write first person personal narratives that highlight the most important details.

Activity Example (Informational): Students respond to numerous critical reading questions in a choice of five narrative nonfiction texts analyzing author’s intent, selection of details to support that point, and identifying evidence of bias.

Integration of Knowledge and Ideas

19. Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors. For informational texts, evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.

Activity Example (Fiction): Students compare the movie version of an independent reading book to its book form, accounting for changes in medium.

Activity Example (Informational): In informational text, students determine whether video or audio supplements, sidebars, or links enhance or detract from the main argument or presentation of a non-fiction book.
20. Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new. Delineate and evaluate the argument and specific claims in an informational text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.

Activity Example (Fiction): Students read excerpts from Joseph Campbell’s *The Hero With a Thousand Faces* and perform an analytical essay about the manifestation of the archetypal hero in modern culture, comparing a modern hero to one of antiquity.

Activity Example (Informational): Students identify evidence of bias in narrative nonfiction texts, picking apart arguments and claims by assessing the validity of the author’s reasoning and presenting counterexamples when appropriate.

21. Analyze a case in which two or more informational texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Activity Example (Fiction): n/a

Activity Example (Informational): Students read opposing opinions and statistics about Puerto Rico’s political situation and engage in a debate over the best course forward for Puerto Rico: as an independent nation, the 51st state of the U.S.A., or its continuance as a U.S. territory.

Range of Reading and Level of Text Complexity

22. Read and comprehend fiction, including stories, dramas, and poems, and non-fiction literature at an appropriate grade level, independently and proficiently.

Activity Example (Fiction and Informational): Students maintain weekly reading journals in which they summarize the session’s reading and respond to critical reading prompts. They may discuss “aha!” moments, make predictions, give advice to characters, assign symbols to characters, analyze a character’s choices, and more. Students also set weekly reading goals.

Writing

Text Types and Purposes

23. Write arguments to support claims with clear reasons and relevant evidence.

a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.

c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.

d. Establish and maintain a formal style.

e. Provide a concluding statement or section that follows from and supports the argument presented.

**Activity Example:** Students write multiple literary analysis essays, responding to a question by developing a thesis statement, finding relevant quotes in text, and then introducing and analyzing those quotes. They learn how to work the quotes directly into their sentences by altering the grammar accordingly. They transition between ideas with the help of a transition word/phrase list, and follow MLA format as they cite their sources both parenthetically and in a works cited page.

24. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.

b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.

c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.

d. Use precise language and domain-specific vocabulary to inform about or explain the topic.

e. Establish and maintain a formal style.

f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

**Activity Example:** Students write three speeches (informative, persuasive, and how-to) that follow specific structural guidelines that are different for each type. Documentation is required, as is a visual aid. In addition to writing the speech out as a paper, students practice and then deliver speeches on note cards, changing words, transitions, and other items as appropriate when moving from a written to a spoken medium.

25. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.

c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events.

d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

e. Provide a conclusion that follows from and reflects on the narrated experiences or events.

Activity Example: Students develop and write an original short story of at least seven pages, informed by lessons focusing specifically on dialogue, description, character creation, beginnings, endings, grammar, and precision of language.

Activity Example: Students develop and write an original play or screenplay with a length of 10 minutes, with lessons focusing specifically on dialogue, character creation, stage directions, precision of language, and with an eye toward a performance.

Production and Distribution of Writing

26. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Activity Example: Students write an op-ed piece about a topic of their choosing, doing extensive research into the subject, and phrasing their op-ed in a more informal manner, as befits op-eds. Students also write academic essays that have the same level of research but with a different style.

27. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate appropriate grade-level command.)

Activity Example: Students peer edit using proofreading marks and the Six Traits rubric, and meet required draft deadlines in order to process their writing.

28. Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

Activity Example: Students’ op-ed pieces are formatted into magazine pages using the Pages program (or another similar program) and published to the Middle School webpage.

Activity Example: During the annual Showcase (as well as other times), students consistently use Google Drive to edit each other’s work, collaborate, and create work with hyperlinks, videos, and other multimedia.
**Activity Example:** Students’ short stories are compiled into a book and published with Blurb or another online publishing site. Students are responsible for editing and turning in publishable work.

**Research to Build and Present Knowledge**

29. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

**Activity Example:** Students develop a research question about Puerto Rican culture before the annual trip to the island, create a survey, poll, or interview, and carry out that research at Juan Ponce School in San Juan. After returning to school, students write a newspaper article discussing their findings.

30. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

**Activity Example:** Students learn and apply proper MLA format for citations on every academic writing exercise while in middle school. They learn how to assess the validity of websites and use sites like Alexa.org to help them gather web statistics. They learn about bias in media and the difference between a reliable and an unreliable source.

31. Draw evidence from literary or informational texts to support analysis, reflection, and research, using both literature and literary non-fiction texts. (See Reading section)

**Activity Example:** See #1. Also, students read a narrative non-fiction title, accompanied by a 5-page multimedia reading guide that asks them to respond using quotes in the text, linked online newspaper articles, or videos/podcasts to help support their answers.

**Range of Writing**

32. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

**Activity Example:** Students complete at least one in-class essay each year, a longer research-based piece each year, and several creative pieces each year. Students do a focused sitting and observation, paying attention to descriptive details or the reality of what dialogue sounds like as opposed to what they read in books or hear on TV. They do several reader’s responses as well. Their op-ed piece, short story, play, and speeches are all developed over a series of weeks.
MIDDLE SCHOOL CURRICULUM

Math

Mathematical goals for 7th/8th grade students:
1. To recognize mathematics as a practical tool in the world
2. To recognize mathematics as a vehicle for human creativity
3. To apply appropriate strategies and procedures to solve problems
4. To understand and use mathematical language, symbols, and syntax
5. To solve problems accurately, efficiently, and flexibly
6. To apply mathematical reasoning
7. To represent mathematical ideas (problems and solutions)
8. To communicate mathematical ideas, problems, and solutions clearly
9. To make connections to other topics, subjects, and the outside world

Mathematics/Pre-Algebra Curriculum:

Number Sense and Operation

All students work toward becoming proficient in all operations with rational numbers as well as being able to represent a number in a variety of forms (fractions, decimals, and percents). They will refine and extend their understanding of ratios, percents, and proportions. Students are encouraged to use concrete models to solidify their conceptual understanding of the processes studied. A greater emphasis is placed on the written form of mathematical procedures (what your work looks like), such as specific procedures for solving proportions and other equations. Computation drills (without the aid of a calculator) may be used as needed to keep computational skills sharp.

- Practice working with rational numbers - positive and negative integers, fractions, decimals, mixed numbers, percents, and exponents
  - Compare, order, estimate, translate and compute with all operations
  - Graph on a number line
- Solve word problems using ratios, proportions, inverse operations, and estimation
- Understand mathematical notation systems, including scientific notation, exponents
- To apply and understand the concept of absolute value
- How to read solutions on a scientific calculator, how to use specific keys, and to understand when and why it is a necessary tool

Patterns, Relationships, and Algebra
Problem solving is an integrated, on-going process. Students begin to organize mathematical relationships according to the rules of mathematics. Concepts include properties of arithmetic, translating and evaluating expressions, solving open sentences and inequalities, and investigating linear relationships through tables and graphs. A weekly problem of the week (PoW) is given to help develop strong problem solving skills.

- **Patterns**: Extend, analyze, generalize, and represent patterns using tables, graphs, words, and symbolic expressions
- **Properties of different operations**, including additive identity, multiplicative identity, multiplicative property of zero, commutative and associative property of addition and multiplication, and distributive property
- **Algebraic expressions**: Evaluate with a given variable, create and use expressions (relate to words, tables, and graphs), and simplify using like terms
- **Inequalities and linear equations**: Solve using tables, graphs, models and algebraic methods. Create equations based on analysis of tables, graphs, and models (proportional and non-proportional relationships)

**Geometry and Measurement**

Students apply their understanding of area to more complicated situations extending this knowledge to the surface area and volume of various solids. Students are expected to understand the derivations of various formulas, find the missing component of a formula, and use a formula to solve problems. The Pythagorean theorem, similar triangles, and scale drawings become important in the study of ramps and indirect measurement.

- **Units of measure**: Selecting and using appropriate units, and converting within the same system (Metric and US customary)
- **Angles**: Finding interior and exterior measurements, finding measurements in intersecting lines, and finding measurement in parallel lines cut by a transversal
- **Graphing**: In all four quadrants and transformations (translations, dilations, reflections, and rotations) on coordinate plane
- **Drawing**: Creating polygons and circles with tools and nets
- **Recognizing congruence, and similarity** in 2D and 3D figures based on appearance and attributes
- **2D figures**: Finding area and perimeter or circumference, including right triangle – characteristics of and applying the Pythagorean theorem
- **3D figures**: Finding the surface area and volume

**Data Analysis and Statistics**

The emphasis in the statistics unit is on interpreting results. Students present multiple data sets in line, bar, and circle graph as well as some relatively new graphs, namely, box and whiskers and stem and leaf. Although some computer work may be done,
constructing the graphs by hand encourages students to focus more on scales and other components of the display. By calculating range, mean, median, mode, and quartiles, students learn to draw conclusions about what is typical in a sample.

- **Tables and graphs**, including conducting a survey and analyzing the data by selecting, creating, interpreting varies graphs for the data- circle graphs, line, bar, stem-and-leaf plots, and box and whiskers
- **Mean, median, mode, range, and quartiles**, including finding, describing, and interpreting and using appropriate measures of central tendency for a given situation and using it to compare data sets

**Probability**

Using data from games of chance, students explore probability concepts including independent and dependent events, the Fundamental Counting Principle, permutations, and combinations. A variety of strategies including tree diagrams and Pascal’s Triangle are employed.

- **Using tree diagrams, tables, and lists; computing probabilities**
- **Theoretical, experimental and simple compound events**

**Algebra Curriculum (broken down by unit)**

**Unit 1: Basic Principles of Algebra**

- Read, write, and evaluate verbal, numerical, and algebraic expressions
- Recognize and apply identity, equality, and computational properties

**Unit 2: Rational Number and Operations**

- Compute and solve problems with integers
- Compute and solve problems with rational numbers
- Graph integers and rational numbers on a number line

**Unit 3: Equations**

- Write and solve multi-step equations
- Solve equations with variables on both sides
- Solve equations using means/extremes property

**Unit 4: Applying Algebraic Principles to Real Life Problems**

- Solve word problems using ratio and proportions
- Solve three types of percent problems and percent increase/decrease
- Solve mixture problems
- Solve problems involving direct and inverse variation

**Unit 5: Inequalities in One Variable**

- Solve and graph simple inequalities
- Solve and graph compound inequalities
- Solve and graph absolute value inequalities

**Unit 6: Polynomials**
• Add and subtract polynomials
• Multiply polynomials
• Divide polynomials
• Multiply and divide quantities in scientific notation
• Multiply special binomial products

Unit 7: Factoring
• Factor polynomials by using GCF, distributive property, grouping
• Factor trinomials, difference of squares, and perfect squares
• Solve quadratic equations by factoring

Unit 8: Rational Expressions
• Simplify rational expressions by factoring
• Compute using all operations with rational expressions

Unit 9: Functions and Graphs
• Recognize functions and relations
• Graph and write equations for relations
• Graph inequalities in two variables

Unit 10: Linear Equations
• Recognize relationships with constant rates of change and determine slope
• Express linear relations in point-slope, standard, and slope-intercept form
• Determine x- and y- intercepts
• Graph linear equations from five data sets
• Recognize and graph parallel and perpendicular lines from a given line
• Determine midpoint of a line segment

Unit 11: Systems of Equations
• Graph a system of equations
• Solve a system of equations by graphing
• Solve a system of equations by substitution
• Solve a system of equations by elimination method by adding or subtracting and/or by multiplying or dividing.

Unit 12: Radical Expressions
• Simplify radical expressions (rational and irrational)
• Apply the Pythagorean Theorem
• Use and understand the distance formula

Unit 13: Quadratics
• Graph and approximate the roots of the equation by finding the equation for the axis of symmetry and coordinates of the vertex
• Solve quadratics by completing the square
• See how the quadratic formula is developed and use it to solve
• Use the discriminant to determine the number of real roots
MIDDLE SCHOOL CURRICULUM  
History and Geography

Students in middle school begin to study history from a more modern perspective. While their previous experience of history has taken them many centuries into the past, middle school students look specifically at the 19th and 20th centuries. They use their new level of abstract thinking to analyze how historical trends and events came about, and what the consequences were. The skills of historical analysis include the ability to explain the significance of historical evidence; weigh the importance, reliability, and validity of evidence; understand the concept of multiple causation; and understand the importance of changing and competing interpretations of different historical developments.

At LMS, students often take on roles of historical figures, in dramatic role-plays and in their written work. They analyze historical documents and images, on their own and with others. They learn to take notes in class and learn information for tests. They read textbooks as well as primary source documents, pulling out the main ideas and presenting them to peers. They are often asked to relate their readings to their own ideas, and to modern political and social issues. The rich curriculum comes from Facing History and Ourselves, PBS, and other sources.

Because middle school students will be exposed to the facts of history again in high school, middle school is a time for them to learn to think like historians, rather than to get a broad-brush overview of American history. We take time to delve into the big, essential questions about historical situations, as we study a time period in depth: Why did so many people go along with Hitler when they knew it was wrong? How did all sides of the Mexican-American war feel like they were “in the right”? How much should government intervene in the free market? These questions are engaging and developmentally appropriate for the middle school brain, which is learning to see a new level of complexity, and also has a strong sense of justice.

History work often relates to the work students are doing in Literature and Science classes. As with most subjects, middle school students do history in mixed-age groups, on a two-year rotation.

**Learning Standards and Activity Examples include:**

**History**

1. Students will recognize that individual people have made choices that shaped history.

   **Activity example:** Students watch Confessions of a Hitler Youth and discuss how Alfons Heck and thousands like him made their decision to be involved in Nazism.

   **Activity example:** Students read telegrams from the families of the Little Rock Nine to Eisenhower. They examine the families’ role in the civil rights movement as a whole.

2. Students will see that individual choices are shaped by many factors, including group identity, economics, media, fear, and others.
Activity example: Students learn to make identity charts for characters, historical figures, and themselves. They explain decisions using these identity charts.

Activity example: Students compare the abolitionist tactics of William Lloyd Garrison (moral suasion) and David Walker (inciting armed revolt). They make identity charts for both men, and make guesses about why they chose those tactics.

3. Students understand the role that government plays in the lives of individual citizens, and the different parts of the US government.

Activity example: Students independently research a modern Supreme Court decision, predicting what its legacy will be.

Activity example: Students learning about the events of the “Little Rock Nine” study the role of the federal vs. the state government, and the 3 branches of the federal government.

Activity example: Students investigate the history of Puerto Rico’s political status as a territory of the United States. They do research and participate in a debate about whether Puerto Rico should be a state, a territory, or an independent country.

4. Students see that economic forces play an important role in decision-making, both in history and in the modern world

Activity example: Using an online module, students examine the arts, the economy, and the government of the Weimar Republic, which preceded Hitler’s Germany. They make connections between hard economic times and the other political and personal aspects of life.

Activity example: In a class field trip to the Tsongas Industrial History Center in Lowell, students find out more about the transition from an agrarian economy to an industrial economy.

5. Students explore the meeting of different cultures and how it contributes to cultural identity.

Activity example: Students explore Puerto Rican identity, through historical survey readings as well as a sociological survey of middle school students in Puerto Rico.

Activity example: Students participate in a role-play of the Cherokee and Seminole response to the Indian Removal Act. The two groups had very different cultural values, and yet sometimes found themselves as allies.

Activity example: Students think about a group to which they belong, and write about an important artifact or symbol from that group. Then they write about the same artifact or symbol, from the perspective of someone who is outside of the group.

6. Students learn the basic similarities and differences among world religions.

Activity example: Students prepare a class presentation which compares traditions from several different religious traditions (for example: marriage, death, prayer).

Activity example: On a field trip, students watch prayers at a local mosque and a Hindu temple. They reflect about what they saw, finding things that seemed familiar or unfamiliar to them.

7. Students see religion as a factor in many historical situations.
Activity example: Students read the views of several ministers about slavery in the 1700’s. They also read Quaker writings on slavery. Students notice how the issue of morality is used.

Activity example: Students find religious language and metaphors in the art and writing of Manifest Destiny.

Activity example: Students watch and discuss the documentary, Promises, about the Israeli-Palestinian conflict.

8. Students will think about the factors that led to the geographic expansion of the US in the early 1800’s.

Activity example: Students working in small groups analyze documents and images having to do with Manifest Destiny (for example, John L. O’Sullivan’s newspaper article, George A Crofutt’s American Progress)

Activity example: Students examine the history of the Georgia-Florida border, doing a jigsaw reading on runaway slaves, Seminole communities, and plantations.

9. Students will investigate the impacts of the geographic expansion of the US in the early 1800’s on different groups of people.

Activity example: Students read about a character and participate in a “tea party” about the Mexican-American war. They find other characters who agree with their position, and they learn why others hold the position they do. Characters range from peace activists to soldiers, from aristocrats to settlers to slaves. Through this activity, students put together a picture of the range of opinions.

Activity example: Students participate in a role-play comparing the Cherokee and Seminole responses to the Indian Removal Act. They present at a mock congressional hearing, where members of each group give their opinions about what should be done.

10. Students investigate the origins of slavery in the US, comparing the democratic ideals of the new USA with its slaveholding practices.

Activity example: Students break into groups and read about a variety of people who were present at the time of the revolution. (Thomas Jefferson, Benjamin Banneker, Lord Dunmore, Abigail Adams, Phyllis Wheatley, and others) They write about how each of them would have responded to the following statement: “American slavery is an oxymoron.”

Activity example: Using references from “Africans in America,” students make a timeline of the laws and court decisions that brought the earliest African Americans from indentured servitude to involuntary slavery.

11. Students investigate the abolitionist movement, as an example of the dismantling of a social system.

Activity example: Students listen to lectures and take notes on John Brown, Harriet Tubman, and Frederick Douglass.

Activity example: Students independently research an abolitionist. From their research, and from class notes, they compare their “own” abolitionist with John Brown, Harriet Tubman, or Frederick Douglass.
Activity example: The class takes a field trip to Boston and tours the Black Heritage Trail. Students recognize personalities from their independent research.

12. Students understand the economic and political forces behind the great depression and the new deal.

Activity example: Students do a jigsaw reading and presentation about the early years of Franklin D. Roosevelt and Eleanor Roosevelt.

Activity example: Students look at documents and photos about the “bonus march.” They analyze why it happened, why it was broken up with force, and what it had to do with the public opinion of Hoover.

Activity example: Students listen to music of the 20’s and music of the 30’s. They analyze the social mood associated with the music of each time period, and relate that to the economy.

13. Students discover what structures the Nazis put in place to make the Holocaust possible.

Activity example: Students examine posters and films produced by the Nazis, determining why they fit with the times, and why they were effective.

Activity example: Students create a giant timeline of images from 1933-1940, detailing the changes in policy and law that happened over the decade. (from book burning, to educational practices, to identification, to forced removal)

14. Students learn about individual and collective responses to the Holocaust.

Activity example: Students meet a survivor of the Holocaust from Hungary, asking her questions and writing about her story.

Activity example: Students analyze primary sources written by Holocaust survivors, soldiers, bureaucrats, and bystanders.

15. Students recognize individuals standing up against injustice, and see what factors and characteristics helped them to do so.

Activity example: Students examine a photo of Elisabeth Eckert, one of the “Little Rock Nine.” They listen to her account of her first day at Central High, and they write about what factors might have put her in that position.

Activity example: Students watch a video about a Polish family who hid a Jewish couple in their home during the Nazi occupation. They write a pro/con list from the point of view of the rescuers, analyzing factors that were influencing them in each direction.

16. Students understand the basic theoretical differences between capitalism and communism.

Activity example: Students act out a scripted talk show conversation between Karl Marx and Adam Smith.

Activity example: In pairs, students sort out statements on a spectrum, from capitalist to communist.

Activity example: Students compare the theoretical ideas of communism with the statements of prosecutors during the McCarthy trials.

17. Students understand how the cold war shaped the modern world.
Activity example: Students investigate maps of communist and capitalist countries during the 50’s, 60’s and 70’s.

Activity example: Students read and summarize the various perspectives of Kennedy’s cabinet during the Cuban Missile Crisis, and make predictions about the ultimate actions taken by the president.

18. Students understand the parts of the civil rights movement in the US.

Activity example: Students read the majority and minority opinions in the Plessy v. Ferguson case. They take on the role of a person in the time, and write a letter home explaining how they think the decision might impact their life.

Activity example: Students meet a someone who participated in the Freedom Ride bus integration of the 1960’s. They ask questions and put together an art project about his life.

Activity example: Students participate in workshops at the annual Montessori Conference on Diversity, held biannually at LMS.

19. Students fit their own family and community into their understanding of history.

Activity example: Students do oral interviews relating to 20th century history. They produce a short radio story about their favorite oral interview from the year.

Activity example: Students visit the Black Heritage Trail in Boston and fit their city into their broader knowledge of slavery and abolition.
MIDDLE SCHOOL CURRICULUM

Science

The middle school years are a time of tremendous physical, emotional, and cognitive changes for students. It is also a pivotal time in their understanding of and enthusiasm for science. Research has shown that if educators don’t capture students’ interest and enthusiasm in science by grade 7, students may never find their way back to science.

A hallmark of science in the real world is that it generates theories and laws that must be consistent with observations. Much of the evidence from these observations is collected during laboratory investigations. A school laboratory investigation (also referred to as a lab) is defined as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models.

LMS students are sometimes given cookbook-like “recipes” for lab investigations, and they also have multiple opportunities to make hypotheses, design investigations, engage in scientific reasoning, manipulate equipment, record data, analyze results, and discuss their findings. They think critically and logically to define the relationships between evidence and explanations. As part of a scientific community, they work to communicate scientific procedures and explanations clearly. Students use mathematics in all aspects of scientific inquiry. They collect data and learn to make sense of graphical and other abstract representations essential to scientific understanding. As they learn to make accurate measurements using a variety of instruments, their experiments become more quantitative and their physical models more precise. Students also read about science, use computer simulations, create models, and observe teacher demonstrations and short lectures. As NSTA recommends for the middle school level, students are engaged in laboratory work about 80% of their science instruction time.

As with most subjects, middle school students do science in mixed-age groups on a two-year rotation, with life science one year and physical science the other.

Learning Standards and Activity Examples include:

Life Science

1. Students will understand the basic unit of life, the cell. They will know the parts and functions.

   Activity example: The class creates a 3-D model of a cell, using metaphorical parts to represent the real parts (for example, using a matchbox car to represent the cell’s transportation, or a flash drive to represent the DNA)

   Activity example: Students invent a fictional cell, either animal or plant, with all the appropriate organelles. Sketch and paint the cell in art classes.

   Activity example: With a lab partner, students observe and sketch a range of plant and animal cells with a microscope to identify the cell wall, cell membrane, chloroplasts, vacuoles, nucleus, and cytoplasm when present.
2. Students will understand and explore the processes of mitosis, diffusion, cellular respiration, and photosynthesis.

    Activity example: Students soak chicken eggs, which are single cells, in vinegar to remove the hard shell. When studying about osmosis, they make predictions about what kinds of materials will diffuse through the cell membrane, and what will not. They soak the eggs overnight in different liquids (salt water, soap, corn syrup, etc.), measuring the egg’s circumference before and after. Students can look up molecular formulas for the different chemicals they are using. They modify their experiment over a series of days, keeping data.

    Activity example: A student investigates her own level of cellular respiration by blowing into a flask of bromothymol blue, which is an indicator of carbon dioxide. She designs an experiment to measure her own production of carbon dioxide (before and after physical exercise, or some other variable.)

    Activity example: Students participate in an online module on mitosis, where they watch a short video of cells dividing and identify the start and end of each phase of mitosis. They learn about how cancer means cells dividing out of control. They virtually test the effects of 3 imaginary chemicals on mitosis, by watching the short video change, and they recommend one of the chemicals to cure cancer.

3. Students compare and contrast the following microorganisms: protists, fungi, bacteria, and viruses.

    Activity example: Using a microscope, students observe, describe, record, and compare amoeba, paramecium, and euglena, according to their shape, structure, and method of mobility.

    Activity example: Using plastic sandwich bags and food, students design an experiment to figure out what factors affect bacterial growth.

    Activity example: Students use math to create a scale model of a virus and bacteria.

4. Students will understand how genes are inherited, through classical Mendelian genetics.

    Activity example: Students learn about Mendel’s discovery of the recessive allele, through reading about his pea experiments.

    Activity example: With a partner, students do online simulated breeding of lemmings. They predict the possible phenotypes of the offspring, given the phenotypes of the parents. They test their hypotheses, and attempt to breed offspring with a certain phenotype (i.e. short tailed, or albino).

    Activity example: Students working on sex-linked inheritance label coins to make up the phenotype of each parent (mother XX, father XY). They then attach a dominant or recessive allele to each of the X’s. Through flipping coins multiple times, they can tally the likely ratio of the different outcomes, in terms of genotype and phenotype. They confirm their work with Punnett squares. Coin flipping gives an idea of the randomness of outcomes with each flip.

5. Students will understand the basics of molecular genetics, including meiosis, transcription, protein synthesis, and DNA replication.

    Activity example: The class watches a video about meiosis, and students compare it with mitosis.
**Activity example:** Students assemble a model of a portion of DNA, which includes 20 base pairs in a double helix. They discuss and imagine the size of a complete chromosome.

**Activity example:** Students use the PBS model, “Explore a Stretch of Code,” to examine a small section of DNA from one chromosome.

**Activity example:** Students isolate some of their own DNA from their cheek cells, using salt water, soap, and alcohol.

6. Students will recognize that biological evolution accounts for the diversity of species developed through gradual processes over many generations.

**Activity example:** Students read a selection from Darwin’s writings on the Galapagos, and illustrate some of his findings.

**Activity example:** Students do a multi-generational simulation with cards representing alleles of different colors. They draw 2 cards at a time, to represent a genotype. They make environmental changes (dark forest floor, sandy ground) and see how the mouse population responds over many generations.

7. Students will understand the hierarchical organization of multicellular organisms from cells to tissues to organs to systems to organisms.

**Activity example:** Students sketch a “Chinese Box” diagram of the relationship between cells, tissues, organs, systems, and organisms. The diagram can be extended to include population, species, community, ecosystem, and biome.

**Activity example:** A student examines and describes different layers of the stomach, using a microscope.

8. Students will identify the general functions of the major systems of the human body (digestion, respiration, reproduction, circulation, excretion, protection from disease, and movement, control, and coordination) and describe ways that these systems interact with each other.

**Activity example:** Students learning about the musculoskeletal system design and build a functioning prosthetic hand, which can open, close, and grasp objects.

**Activity example:** Students learning about the immune system create a video of an imaginary newscast, detailing the invasion of pathogens and the immune system’s response.

**Activity example:** Students learning about the nervous system test a hypothesis about the effects of sugar or caffeine on metabolism. They use blackworms and microscopes to test their hypothesis.

9. Students will understand human reproduction, including the changes associated with puberty.

**Activity example:** Students participate in a game about the facts of puberty, with teams answering questions collaboratively.

**Activity example:** Students do optional “family homework,” where they interview a parent about their ideas about sexuality.

**Activity example:** Students participate in a demonstration about pregnancy prevention/STD prevention.
10. Students will give examples of ways in which organisms interact and have different functions within an ecosystem that enable the ecosystem to survive.

   **Activity example:** Study several symbiotic relationships such as oxpecker (bird) with rhinoceros (mammal). Identify specific benefits received by one or both partners.

   **Activity example:** Students gather data on macro invertebrates in a local stream, making inferences about environmental conditions based on their data.

**PHYSICAL SCIENCE**

11. Students learn how to design and complete an experiment.

   **Activity example:** Students learn to use the measurement tools of the classroom (graduated cylinder, triple-beam balance, stopwatch, etc).

   **Activity example:** Using the metric system, students calculate the volumes of regular objects from linear measurements. They measure the volumes of the same objects by displacement of water. They discuss the accuracy limits of these procedures and how these limits explain any observed differences between the calculated volumes and the measured volumes.

   **Activity example:** Students experiment with maple samaras. They create a hypothesis about speed or rotation or distance. They design an experiment, controlling variables. Together, they collect data and write a lab report to explain their work.

12. Students will be able to measure and graph speed, and calculate acceleration.

   **Activity example:** Students compare the speed of wind-up toys, by measuring how far the toy progresses for each interval of time. They make a position-time graph and explain their findings.

   **Activity example:** Using an inclined plane and a toy car, students compare acceleration due to gravity, at different angles of the plane. They graph and explain their results.

13. Students will examine the effects of different variables on acceleration.

   **Activity example:** The class predicts the effect of mass on acceleration. They find a volunteer with a large car, and a volunteer with a small car. A group of students pushes the car, attempting to put a constant amount of force on the car, measured by bathroom scales. Other students time the car’s progress at 5-meter increments. After recording several trials of each, students graph the data on the two cars, and write a conclusion.

   **Activity example:** Students make hypotheses about acceleration and mass, acceleration and mass, or mass and friction. They test their hypothesis using spring scales, along with meter sticks, stopwatches, triple-beam balances, and other objects. They write and present lab reports.

14. Differentiate between weight and mass, recognizing that weight is the amount of gravitational pull on an object.

   **Activity example:** Using a triple-beam balance, students create an inertial balance to weigh objects under water.

15. Students will identify and understand Newton’s 3 laws.
Activity example: Students make a model hovercraft to demonstrate the law of inertia.

Activity example: A pair of students analyzes a given you-tube video for the 3 laws (gymnastics events, swimmers doing flip-turns, dominoes, rocket launches, etc.). They prepare a presentation for the class, stopping the video to demonstrate the laws and important vocabulary.

16. Students will examine the structure of atoms and molecules. They will differentiate between an atom (the smallest unit of an element that maintains the characteristics of that element) and a molecule (the smallest unit of a compound that maintains the characteristics of that compound).

Activity example: Students use atomic models (or Lego blocks, assigning colors to various atoms) to build molecules of water, sodium chloride, carbon dioxide, ammonia, etc.

Activity example: Students read about the history of the model of the atom, and create an illustrated timeline of discoveries.

17. Students will investigate elements in the periodic table. They will recognize that there are more than 100 elements that combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.

Activity example: Using the Aldrich guide, students look up and make models of the molecules in everyday substances.

Activity example: Students are given element cards, with basic information. They sort elements into different groups and create a model periodic table.

Activity example: Students use electrolysis to isolate copper from copper chloride.

Activity example: Students investigate the properties of metals, including copper, aluminum, iron, silver, platinum, and magnesium. They use magnets, hot plates, conductivity testers, thermometers, batteries, light bulbs, and weak acids to design a variety of tests to compare the metals. They also use information from the periodic table. They design a presentation to display their findings.

18. Students will explain and give examples of how mass is conserved in a closed system.

Activity example: Students melt, dissolve, precipitate, and measure various substances to observe examples of the conservation of mass.

Activity example: Students observe a chemical reaction, like baking soda and vinegar. They use atomic models to find out how the atoms have recombined in the chemical reaction.

19. Students will differentiate among volume, mass, and density.

Activity example: Students measure volume and mass of a variety of materials, using a graduated cylinder for water displacement, and a triple beam balance. They test the same materials for how they float in water, and in salt water. They determine how mass and volume are related to density.

20. Students explain the effect of heat on particle motion through a description of what happens to particles during a change in phase. They will relate this to observations of heat’s influence in chemical reactions.
Activity example: Students will manipulate computer simulations of a substance in the different states of matter, changing the virtual temperature and watching the particle motion change.

Activity example: Students watch gobstoppers dissolve, in a beaker of water. They make a hypothesis about the effects of heat on the speed of dissolving. They design an experiment, carry it out, and report their findings in a lab report.

Activity example: Students measure the temperature before and after chemical reactions, to determine whether the reaction was endothermic or exothermic.

21. Students will understand the different types of energy, transformation of energy, and the law of conservation of energy.

Activity example: Students design a device to keep an ice cube from melting for the longest possible time.

Activity example: Students work with the power company to conduct an energy audit of the school. They use infrared cameras, and recommend changes to the maintenance staff.

Activity example: Students read about and compare oil, natural gas, coal, solar, wind, and waterpower.

Activity example: Students design and build a solar powered device that does physical work.

22. Students will investigate the basics of electricity and magnetism.

Activity example: Students work with series and parallel circuits.

Activity example: Students make electromagnets with batteries and wire.

Activity example: Students find out the power ratings of several appliances in their home. They estimate the energy required to run them for one year, and calculate the estimated cost.

23. Students will differentiate between physical changes and chemical changes.

Activity example: Demonstrate with molecular ball-and-stick models the physical change that converts liquid water into ice. Also demonstrate with molecular ball-and-stick models the chemical change that converts hydrogen peroxide into water and oxygen gas.

24. Students will write and understand equations for chemical reactions.

Activity example: Students classify written equations as synthesis, decomposition, or replacement.

Activity example: Students work with the equations for photosynthesis and respiration.

Activity example: Students observe the reaction between baking soda and vinegar. They look up the molecular formula for each and predict what gas is being released, by writing a chemical equation. They design a way to test for the presence of this gas.

25. Students will investigate ionic and covalent bonds, and pH.

Activity example: Students draw chemical models for several substances, including water, vegetable oil, sugar in water, Epsom salts in water, and sodium chloride in water.
Using drawings, they predict whether they have ionic or covalent bonds. Then they use a conductivity tester made from a battery, wires, and a bulb, to support or refute their predictions.

Activity example: Students make soap. They test each of the ingredients’ pH before combining, and at each step of the process.

Activity example: Students use fruits, vegetables, or flowers to make an acid-base indicator. They compare their indicator to the standard pH scale, and use the indicators to test a variety of substances.
MIDDLE SCHOOL CURRICULUM
Spanish

In the Middle School, students learn to use Spanish in interpersonal communications. They share information, reactions, feelings, and opinions as they speak, write and sign with one another. They interpret what they read and what they experience from audio and video recordings. Students apply their Spanish using a variety of media to present information, concepts, ideas and opinions.

Middle schoolers use Spanish to investigate the practices and perspectives of diverse cultures. As they compare Spanish with their native language, they reflect on the nature of language and the concept of culture. They use Spanish within and beyond the classroom to interact and collaborate in their community and with native Spanish speakers.

The primary text used in this course is *Así se dice, Levels 1 and 2*, published by McGraw-Hill. This program includes on-line texts and flashcards, common Spanish expressions, a cookbook, a media library, world news, and tools for correspondence.

The Middle School travels to a Spanish-speaking community for an annual week-long field study, usually to Puerto Rico or Spain. In preparation for the field study, students learn site-specific vocabulary and expressions. On site, they work with students in a sister school, practicing conversation they collaborate.

The unit goals are as follows:

**LEVEL 1**

Unit 1: “¿Cómo somos?”
- Identify and describe people and things
- Tell where someone is from
- Tell what subjects you take and express opinions about them
- Talk about Spanish speakers in the United States
- Use nouns, adjectives, and articles
- Use the verb ser
- Use tú and usted

Unit 2: “La familia y la casa”
- Talk about families and pets
- Describe a house or apartment
- Describe rooms and some furnishings
• Discuss a family from Ecuador
• Use the verb tener
• Use possessive adjectives

Unit 3: “En clase y después”
• Talk about what I do in school
• Identify some school clothes and school supplies
• Talk about what my friends and I do after school
• Compare school and after-school activities in Spanish-speaking countries and the United States
• Use the present tense of -ar verbs
• Use the verbs ir, dar, and estar
• Use the contractions al and del

Unit 4: “¿Qué comemos y dónde?”
• Identify foods and discuss meals
• Talk about places where you eat
• Order food or a beverage at a café
• Compare eating habits in Spain, Latin America, and the United States
• Use the present tense of regular -er and -ir verbs
• Use expressions with the infinitive—ir a, tener que, acabar de

Unit 5: “Deportes”
• Talk about sports
• Describe a soccer uniform
• Identify colors
• Compare team sports in the U.S. and Spanish-speaking countries
• Use the present tense of stem-changing verbs
• Use verbs such as interesar, aburrir, and gustar

Unit 6: “El bienestar”
• Describe people’s personality, conditions, and emotions
• Explain minor illnesses
• Talk about a doctor’s appointment
• Learn about a literary genre—the picaresque novel
• Use ser and estar
• Use indirect object pronouns

Unit 7: “De vacaciones”
• Talk about summer and winter weather and activities
• Discuss summer and winter resorts in Spanish-speaking countries
• Use preterite tense of regular -ar verbs
• Use preterite of ir and ser
• Use direct object pronouns
Unit 8: “En tu tiempo libre”
- Talk about a birthday party
- Discuss concerts, movies, and museums
- Discuss Hispanic art and music
- Use preterite of -er and -ir verbs
- Use the verbs oír and leer
- Use affirmative and negative words

Unit 9: “Vamos de compras”
- Talk about buying clothes
- Talk about buying food
- Compare shopping in Spanish-speaking countries with shopping in the United States
- Use more numbers
- Use the present tense of saben and conocer
- Use comparatives and superlatives
- Use demonstrative adjectives and pronouns

LEVEL 2

Unit 1: “En avión”
- Talk about packing for a trip and getting to the airport
- Tell what you do at the airport
- Talk about being on an airplane
- Discuss air travel in South America
- Use verbs that have g in the yo form of the present tense
- Use the present progressive tense

Unit 2: “Una rutina diferente”
- Identify more parts of the body
- Talk about your daily routine
- Talk about backpacking and camping
- Use reflexive verbs
- Use commands with favor de

Unit 3: “En tren”
- Use vocabulary related to train travel
- Discuss interesting train trips in Peru and Mexico
- Use the preterite of irregular verbs
- Use the verb decir
- Use prepositional pronouns

Unit 4: “En el restaurante”
- order and pay for a meal at a restaurant
• identify more foods
• identify eating utensils and dishes
• discuss restaurants in Spain and Latin America
• use stem-changing verbs in the present and preterite
• use adjectives of nationality
• use the passive voice with se

Unit 5: “¿Qué se celebra?”
• Talk about several Hispanic holidays
• Compare holidays that we celebrate with those in some Spanish-speaking countries
• Use regular and irregular forms of the imperfect tense

Unit 6: “Tecnomundo”
• Talk about computers, the Internet, and e-mail
• Talk about a digital camera and an MP3 player
• Make and receive phone calls
• Discuss technology in Hispanic countries
• Use the preterite and imperfect tenses

Unit 7: “En el hotel”
• Check into a hotel or hostel
• Ask for things you may need while at a hotel or hostel
• Discuss hotel stays in Latin America and Spain
• Use the present perfect tense
• Use double object pronouns

Unit 8: “Ciudad y campo”
• Describe life in the city
• Describe life in the country
• Discuss the differences between the city and the country in Latin America
• Use the future tense
• Use object pronouns with infinitives and gerunds

Unit 9: “¿Vas en carro?”
• Talk about cars and driving
• Give directions
• Discuss the Pan American Highway
• Use tú affirmative commands
• Use the conditional
MIDDLE SCHOOL CURRICULUM

Anti-Bias

LMS aims to nurture in each student the construction of a knowledgeable, confident identity as an individual and as a member of multiple cultural groups (such as gender, race, ethnicity, or class). We enable children to have comfortable, empathetic interactions with people from diverse backgrounds. We also foster each child’s ability to recognize bias and injustice, and cultivate each child’s ability to stand up, individually and with others, against bias or injustice.

Learning Objectives and Activity Examples Include: (The four objectives listed below are adapted from the goals proposed by “Start Seeking Diversity,” Redleaf Press)

1. Nurture the construction of a knowledgeable, confident identity as an individual and as a member of multiple cultural groups (such as gender, race, ethnicity, or class).
   a. We create conditions (prepare environments) so that all children are able to like who they are without needing to feel superior to anyone else.
   b. We challenge “internalized superiority” and “internalized oppression”?
   c. We help children of non-dominant cultures develop abilities to operate in both their home culture and the dominant culture.
   d. We help children develop the ability to negotiate and problem solve when issues arise from difference between home cultures and the dominant culture

   Activity example: In Personal World class, MS students explore the process of how children mature into adulthood. One intention of this work is to help students feel comfortable with the changes they are undergoing (e.g. development of secondary sex characteristics).

   Activity example: Students in middle school examine characters in fiction and nonfiction, as well as themselves. They make “identity charts” of the important facets of identity for each individual. They have discussions about which parts of identity seem to have a stronger affect on decision-making, and why. Does being different from the dominant culture have an effect on how strongly one identifies with a certain aspect of identity? Does being different from the dominant culture make a person want to hide? Or to be more vocal? Under what circumstances?

   Activity example: Students read “Little Boxes,” an essay that deals with the question of how person wants to identify himself when asked to check a box on the census or a similar form. Students write about and discuss pros and cons of defining oneself, and the impact that might have on one’s sense of self, as well as on the way one is perceived.

   Activity example: MS teachers choose literature that addresses stereotypes (Harper Lee’s To Kill a Mockingbird; Elie Wiesel’s Night, mythology – for explorations of androcentrism and misogyny), and they facilitate discussions that challenge stereotypes

   Activity example: The MS community invites students who celebrate holidays and customs outside of the dominant culture to share their experiences with the class (e.g. students preparing for their Bar Mitzvah, Bat Mitzvah or Confirmation).
Activity example: MS teachers work with students whose family celebrations or customs may conflict with school routines. In this way they can celebrate without compromising their learning or feeling penalized for the celebrations.

Activity example: At a Community Meeting, a student raises the issue of changing the class schedule, so that the students can have their open work period towards the end of the day (which they feel works better for them). The class community discusses the issue and chooses to change the schedule on a trial basis.

Activity example: After directions for a new assignment are given, a student approaches a teacher to explain that s/he did not understand specifically what to do (self-awareness, self-respect, and self-advocacy).

Activity example: The class explores the topic of multiple intelligences, and students complete learning styles inventories, in part, so that students can have greater self-awareness, self-acceptance, and will be better able to self-advocate.

Activity example: The class explores the topic of personality types, and students complete an inventory akin to Myers-Briggs, in part, so that students can have greater self-awareness, self-acceptance, and will be better able to self-advocate.

Activity example: The students recently had a structured debate on who was / is the most influential person in the lives of modern-day Americans. This activity provides students with guidance, support, and opportunities to argue productively in a safe environment.

Activity example: In their Personal World work with The Seven Habits of Highly Effective Teens, the students learn and practice techniques (such as prioritization; creating and abiding by a personal mission statement) to help them to be healthier, happier, and more successful.

In Personal World, the students role-play to identify, practice, and discuss certain social skills such as cooperation, creating win-win outcomes, etc.

The class work, particularly in history and literature, highlights and addresses important areas of difference and conflict, rather than shying away from them (e.g. the misogyny in most Mythology; the oppression of Native Americans, slaves, and later minority groups in the US).

Activity example: After studying the Industrial Revolution, the students participate in an activity in which they are the members of a labor union who must discuss issues, set priorities, and make decisions as a group.

Activity example: After studying the Mexican-American War, each student is assigned a character affected by the conflict, who brings a unique perspective on the War. Students interview one another to learn about the various views and myriad effects of the war.

Activity example: Students talk about private and public identity. They think about reasons why a person wants to keep certain aspects of their identity more private, and they acknowledge that everyone has a different threshold for what information they like to share. They write about the different aspect of their own identity (public and private). They make plaster masks decorated with paint, photos, and found objects; the outside of the mask represents the face they show to the world, and the inside represents the face they keep more private.

2. Promote comfortable, empathetic interaction with people from diverse backgrounds.
a. We foster children’s interest in and empathy with difference.
b. We counter children’s fear or judgment of difference.
c. We help children learn to negotiate day-to-day natural discomfort, tensions, problems or conflicts that can arise from difference.
d. We engender in children recognition of commonalities that all people share.

**Activity example:** MS curricular content (especially in history and literature) explores the challenges that marginalized groups have experienced (e.g. slavery in the US; women deprived of rights such as education, owning property, voting; prejudice in To Kill a Mockingbird and Othello; mental disability in Of Mice and Men and Flowers for Algernon).

**Activity example:** In a skit performed by MS classroom teachers followed by a discussion, one teacher shared that his father died when he was young and another teacher shared that she is a lesbian.

**Activity example:** At a community meeting, MS students decided that they wanted to give secret gifts to each other before the winter holiday break. They brainstormed to find a name for the event that would be more inclusive than “Secret Santas.”

**Activity example:** Our studies in history explore how all people yearn for freedom, safety, connection with others, a place to call home, happiness, etc. Our historical studies explore how sometimes the expansion of these desirables for one group can come at the expense of those of others (e.g. colonization of the United States, Manifest Destiny, slavery, capitalism).

**Activity example:** In recognition of Martin Luther King Day, the MS class read and discussed the short poem, “Frederick stood up / So Rosa could sit down / So Martin could walk / So Barack could run / So we can fly.”

**Activity example:** Middle school students study Spanish, and form relationships with Montessori middle school students in Puerto Rico. They notice and discuss similarities and differences such as taste in music, or favorite subjects in school.

**Activity example:** Middle school students interview recent immigrants, from their families or their community. They ask open-ended questions about identity and cultural difference. Along with research, they put their human understanding into a feature article. Their guiding question is, how does immigration affect one’s identity?

**Activity example:** Middle school students read and discuss literature with protagonists from a variety of cultural and economic backgrounds, discussing the tensions among characters.

**Activity example:** Middle school students make a poster about the theme, “Power.” On their collage, they include a swastika as a representation of power. They hear from adults at the school that the symbol can be jarring and hurtful to some who see it up on the wall, even in context. Some students do not want to remove the symbol, because it is a part of their work in middle school to investigate all of history, not just the comfortable parts. They engage in a thoughtful discussion, after which they decide to leave the swastika on the poster with a modification. They plan to put tracing paper over it, so it is still visible, and write, “Never forget” on the tracing paper.

**Activity example:** Middle school students practice conflict resolution independently and with the support of teachers, including: taking responsibility for one’s role in the conflict; expressing one’s frustrations with the conflict (sometimes with “I messages”); and making compromises. For example, teachers helped mediate conflict resolution
between two students who had a habit of taking “playful ribbing” too far, and how that behavior not only affected the two of them negatively, but also spread negativity to those around them.

**Activity example:** At community meeting, middle school students made a proposal to re-schedule the work periods to later in the day, which they felt suited them better. Students discussed the pros and cons of doing so, and ultimately voted in favor of the change.

**Activity example:** With the support of teachers and class parents, middle school students volunteered to conduct a clothing drive for Rosie’s Place, a local shelter for women and children. They also volunteered to help cook and serve a meal at the shelter.

**Activity example:** The middle school class is the buddy class of the toddler class. One reason this partnership was made is because unlike the other classes, which tend to idolize the middle school classes, the toddlers tend to be self-focused. Therefore, the middle school students soon learn that in order to connect with the toddlers, that they (the MS students) need to attend to the needs and wants of the toddlers. Activities with the toddlers included arts and crafts, sharing a breakfast, sledding, and a sprinkler party.

3. Foster each child’s ability to recognize bias and injustice.
   a. We help children develop the knowledge and analytical skills to identify unfair and untrue images (stereotypes) directed at one’s own or another’s identity.
   b. We help children develop the knowledge and analytical skills to identify unfair and untrue comments (teasing and name-calling) directed at one’s own or another’s identity.
   c. We help children develop the knowledge and analytical skills to identify unfair behaviors (discrimination) directed at one’s own or another’s identity.

**Activity example:** Students learn that some groups have been and are subject to stereotypes, untrue comments, and unfair behavior by dominant groups for not having the positive qualities that are denied to them by the dominant groups (e.g. women and slaves are intellectually inferior and not well-educated or intelligent; concentration camp inmates are filthy; women and slaves are not allowed to vote or own property because they are not well-educated, trustworthy, and fully human).

**Activity example:** Students examine a case study of Chinese immigration in the 1800’s. They look at relationships among Chinese settlers and other settlers on the west coast, and the laws and court cases that led to increasing discrimination, ultimately the Chinese Exclusion Act.

**Activity example:** Students do a case study of the integration of Central High in Little Rock, using a Facing History and Ourselves curriculum known as Choices in Little Rock. They examine the role that students, parents, the media, and the government played, in the integration of the high school.

**Activity example:** Students use political cartoons and editorials in history classes, examining how the author’s choice of words/images has an impact on how a particular group of people was perceived.

**Activity example:** Students investigate the stages leading to the Holocaust, which began with definition of the Jews as “other.” Students examine Nazi propaganda, which led to mainstream acceptance of this idea.
4. Cultivate each child’s ability to stand up, individually and with others, against bias or injustice. We help every child learn and practice a variety of ways to act in the face of bias expressed by other children and adults.

**Activity example:** Students learn many highly effective ways that past and present individuals have resisted and opposed bias and injustice (e.g. Chief Seattle’s letter to the US government; Gandhi’s movement for the liberties of Indians and his writing; Thoreau’s defiance of taxes and his writing). Such learning provides modeling, tools, and confidence for students to act similarly.

**Activity example:** LMS elementary children use formal community meetings to raise and correct issues of perceived unfairness in their communities.

**Activity example:** All LMS children participate in annual discussions of the ways that UNICEF seeks to counter inequitable distribution of goods and resources. They are encouraged to help raise funds during the Trick or Treat for UNICEF campaign.

**Activity example:** Students and their families may choose to join faculty and staff in Boston’s Walk Against Hunger.

**Activity example:** Students and their families may choose to join faculty and staff in Boston’s Gay Pride Parade.

**Activity example:** In their study of the Holocaust, students read stories of a number of heroic “upstanders,” people who stood up for others. They write and think about what personal and situational qualities those people had, which allowed them to put themselves in danger for someone else. At the end of the unit, they write letters to their future selves (in high school) about what they hope to do when confronted with a moral quandary, where they could choose to stand up for someone else or not. Teachers mail those letters a year later.

**Activity example:** In their study of industry, students learn about child labor and sweatshops that continue today. They decide that their class business should sell fair trade products, and they educate younger students in the school about why this is important.

**Activity example:** Students learn many highly effective ways that past and present individuals have resisted and opposed bias and injustice (e.g. Chief Seattle’s letter to the US government; Gandhi’s movement for the liberties of Indians and his writing; Thoreau’s defiance of taxes and his writing). Such learning provides modeling, tools, and confidence for students to act similarly.

**Activity example:** Students role-play assertive communication, as opposed to aggressive, passive or manipulative. They think about how assertive communication is generally the most effective way to get something done.

**Activity example:** Students role-play a congressional hearing on the Indian Removal Act, playing roles of Cherokee, Seminole, Northern white missionaries, White Georgia farmers, and the Jackson Administration. They present their views on the Indian removal act in speeches to the mock congress, and learn to support their ideas with evidence and persuasive rhetoric.

**Activity example:** Students compare and contrast the strategies of different abolitionists, learning about different methods of standing up for and ideal.
MIDDLE SCHOOL CURRICULUM
Physical Education

Seventh grade physical education encourages the refinement of motor skill combinations used in game environments. An introduction to the rules and strategies of individual/team sports is emphasized at this level. Through participation in a variety of activities, students will develop a respect for one another and an awareness of opportunities for lifelong fitness.

Eighth grade physical education promotes the use of specialized skills in sport and fitness activities. A working knowledge of rules and game strategies is developed through participation in a wide variety of activities. Eighth grade students will begin to accept responsibility for their own personal fitness and further develop an awareness of opportunities for lifelong fitness.

Self and peer assessment is used a great deal throughout this level.

**Schedule:**
Seventh and eighth grade students participate in physical education classes two times a week for 45 minutes each. Traditional sports including, but not limited to, soccer, basketball, volleyball, lacrosse, and floor hockey are covered. In addition to this scheduled instruction time, students also participate in a 20 or 30 min. personal fitness class. During this time, students are introduced to aerobic training through participation in cardiovascular exercises, conditioning and endurance activities, and agility and footwork drills.

**Thursday athletics:**
The PE program distinguishes LMS from many other middle schools. We offer a “non-traditional” sports program. In the fall, all seventh and eighth grade students are required to participate in after school sports held on Thursday afternoons. A new sport begins every six weeks and includes activities such as, fencing, golf, ultimate Frisbee, team handball, swimming, and rowing. By learning traditional sports during their regular PE classes and participating in these “non-traditional” sports after school, our middle school students have the opportunity to be engaged in a very well rounded athletic experience.
MIDDLE SCHOOL CURRICULUM

Music

The Middle School music program has as its goals to continue to practice the vocalization, instrumentality and literacy emphasized at the younger levels. In MS the computer is introduced as a compositional tool, and the individual is encouraged to explore composition and improvisation as a means of personal expression. Lessons and discussions are also structured around social issues in music (protest, history, satire). At this level music genres, music history, and ideas from world music and ethnomusicology are introduced.

The Middle School music curriculum seeks to consolidate and develop the skills acquired during the child’s experience in the Children’s House, Lower and Upper Elementary music programs.

Through an exploration of African musical systems, the child is introduced to cyclical compositional structures. Various exercises involving body percussion (hand claps, stomps), vocalizations (“speaking” the patterns), as well as pitched and non-pitched instruments, engender a familiarity with pattern-making and interlocking rhythmic figures.

The curriculum also includes a survey of popular styles ranging from Blues to early and contemporary Rock. Here we discuss verse/chorus, as well as more extended formal schemes. Additionally, students prepare and record their own instrumental and vocal arrangements, which are subsequently edited and manipulated using GarageBand.

**Learning Objectives and Activity Examples Include:**

1. To interpret musical works expressively with accurate intonation, rhythm, and steady tempo.

   **Activity Example:** (Read, sing, or follow music from page or book) Students follow a score as they listen, or they sing or play from music notation.

   **Activity Example:** Students practice vocalizations, thus becoming familiar with diction and rhythmic components of songs.

   **Activity Example:** Students sing unaccompanied, and with pitched (keyboard, xylophone, guitar) and non-pitched instruments (percussion).

   **Activity Example:** Students practice the rhythmic components of the songs using body percussion (stomps, claps, snaps) and percussion instruments.

   **Activity Example:** Students “internalize” the underlying pulse of musical examples through a series of kinesthetic/movement exercises.

   **Activity Example:** Through ensemble exercises, students become familiar with the blending of various timbres (“tone colors”) through the combination of different voice and instrument types.

   **Activity Example:** As the student’s familiarity with a particular genre increases, he/she is encouraged to explore either vocal or instrumental improvisation.
Activity Example: (Read, sing, or follow music from page or book) Students follow a score as they listen, or they sing or play from music notation.

Activity Example: Students practice vocalizations

2. To explore musical literature from diverse genres, cultures and historical periods:

   Activity Example: Students sing and analyze folksongs from Southern Africa and Ghana, learning the correct enunciation of these particular languages.

   Activity Example: Students perform works based on Zimbabwean Shona music, using xylophones, drums and percussion.

   Activity Example: Students perform and analyze “Western” musical genres: Blues, pop, early and contemporary Rock.

   Activity Example: Students discuss contemporary social concerns, and how these are reflected in the works of specific musical artists.

   Activity Example: Students discuss music related to those spiritual traditions observed and celebrated by the school.

   Activity Example: Students discuss the relationships between text, formal structure, and musical device of specific works, and the intentions/motivation behind these musical choices

   Activity Example: Students compare and contrast musical examples from different time periods and genres.

3. To develop familiarity with vocal and instrumental ensemble performance (these activities also meet the objective of engendering an awareness of group dynamics/group learning)

   Activity Example: Students are introduced to basic xylophone, hand-percussion, and drumming technique.

   Activity Example: Students compose and improvise melodic and rhythmic figures based on given material.

   Activity Example: Students discuss the timbres of various instruments, and based on these “sound characters,” make decisions as to their use in particular composition.

4. To explore basic music theory

   Activity Example: Students recognize intervals performed by the teacher, and reproduce these intervals either vocally, or with instruments.

   Activity Example: Notation of a melody performed by the teacher (using correct time-/key signatures, and rhythmic notation).

   Activity Example: Notation of a rhythm performed by the teacher with either pitched, or non-pitched hand percussion instruments.

   Activity Example: Analysis of melodic, rhythmic, and textual phrasing.

   Activity Example: Recognizing formal structures such as: call-and-response, verse/chorus, and development and expository schemes.

   Activity Example: Transposition of melodic line, up and down an octave.
Activity Example: Transposition from treble to bass clef.

Activity Example: Aural recognition of major, minor, and pentatonic modes.

5. To engender critical listening and ear training skills (these activities also meet the objectives of improvisation/composition, and the incorporation of technology into classroom learning)

Activity Example: Students critique their own, recorded performances and those of their peers.

Activity Example: Students edit their recorded performances using GarageBand software.

Activity Example: Students manipulate recorded material with GarageBand by creating loops/ostinatos, cutting, and pasting imported sound.

Activity Example: Students incorporate imported sound with pre-existing GarageBand samples, to create new compositions.
MIDDLE SCHOOL CURRICULUM

Practical Life

The purpose of the Montessori Practical Life activities is to help children develop their independence so that they may become fully capable and responsible adults. The Montessori middle school practical life curriculum is a continuation of the practical life skills presented and practiced in the primary and elementary classrooms. Skills pertaining to care of self, care of environment, along with grace and courtesy are still important; however, these activities now begin to take the children outside of the classroom and into the greater community. The exercises in Practical Life also serve an important social purpose. Children become more self-aware, which helps them develop empathy and sensitivity to others, both within and beyond the class and school communities.

Some of the most prominent examples of Practical Life in the middle school involve:

- **Class business:** in which students are exposed to numerous entrepreneurial skills, including conducting surveys, profit analysis, working with a board, and running all the aspects of the business with the guidance of adults. In 2008-9, the students ran a babysitting business at the school.

- **Class committees:** in which each student works as a co-chair responsible for the operations of a committee which serves the class and school communities. Committees included: field trips; end-of-year trip; class business; and classroom jobs.

- **Fall trip:** in which students participate in a three-day, off-campus excursion. In 2008 and 2009, the students went to Kroka Outdoor Expeditions in Marlow, NH. Activities at Kroka included: farm chores; cooking; camping; wilderness skills; canoeing; and rock climbing.

- **End of year trip:** in 2008 and 2009, students spent nine days in Puerto Rico. Activities included: collaborating with a Puerto Rican Montessori School near San Juan; hiking in the rain forest; cooking; exploring a bioluminescent bay at night; camping in cabins; and site-seeing.

- **Preparation for future schools:** in order to prepare our Montessori students for future school experience, the middle school program provides the instruction, support, and practice of skills necessary for success in high school and beyond. Such skills include: note-taking; how to learn and study from text books; and test preparation.

Learning objectives and related activities include:

1. Students will care for their learning, building their sense of responsibility.

   **Activity example:** Students maintain a daily assignment book so that they know what materials they will need and when assignments are due.

   **Activity example:** Students set short-term and long-term goals to help direct and motivate their learning (e.g. complete 20 math problems in the next 30 minutes; turn in all my assignments for the next two weeks; master diagramming sentences in grammar through daily practice).
Activity example: Students prepare for and conduct student-parent conferences twice a year, in order to review their report cards, personal goals, and samples of their work in the portfolios.

2. Students will care for themselves, building their sense of responsibility.

Activity example: In science class, students learn about the physical and emotional changes of puberty. They discuss how to take care of their newly adult bodies.

Activity example: During out-of-school activities (including overnights), students are responsible for their own hygiene and physical safety (e.g. risk by choice on high ropes course; having a buddy during field trips; having the phone numbers of chaperones on trips, if they get separated from the group).

Activity example: Students work with the class business to raise money for their class trip, through babysitting or selling snacks. By doing some of the work to fund their own trip, they are showing their independence.

3. Students will responsibly care for their belongings.

Activity example: Students are responsible for packing and keeping track of their belongings during a week-long trip in Puerto Rico. They manage keeping some clothes dry in the rainforest, and organizing to find what they need throughout the week.

Activity example: Each Friday, students clean out and organize their folders, binders, lockers, and cubbies: recycling some things, trashing others, and putting completed work in their portfolios.

4. Students will take responsibility for the care of their environment.

Activity example: Students have daily classroom jobs, such as: recycling, washing tables, and organizing furniture.

Activity example: Students are responsible for cleaning up for themselves, returning materials they use, and setting areas up as they found them.

5. Students will take responsibility for the care of their class community.

Activity example: Students make suggestions and raise concerns in a community meeting binder. On Monday morning, the community discusses the issues raised and votes to address the issues, as needed. (For example, students might raise and address concerns about classroom jobs not going smoothly, and how to make improvements.)

Activity example: Students care for one another in many ways, including: acknowledgments at Community Circle; appreciations at birthday celebrations; praise for work well done; inclusion in activities; etc.

Activity example: Students thoughtfully peer edit one another’s work, giving attention to specific positives, and accurate feedback.

Activity example: On a trip, students plan, shop, and prepare meals for their classmates.

Activity example: A pair of students chairs a committee on out-of-school-events. They organize dances, outings, and volunteer efforts for the class.
6. Students will take responsibility for the care of their school community, realizing their increased influence in the school community and exercising it responsibly.

   Activity example: Each middle school student has a toddler buddy for the year. Middle school students care for the toddlers in activities such as bubble-blowing, sledding, nap time, and supervision (often on their laps) during whole-school events.

   Activity example: Middle school students serve as tour guides for prospective students and prospective families during visits and Open Houses.

   Activity example: Some students volunteer to help teachers with the dismissal process (supervising, helping into cars, etc.) of younger students.

7. Students will express social and global responsibility.

   Activity example: Some students collect money for UNICEF while trick-or-treating and/or around Halloween.

   Activity example: Middle school students organized a school-wide collection of used or new Halloween costumes for a local shelter for women and children.

   Activity example: Some students participate in the Boston Gay Pride Parade.

   Activity example: Students participate in classroom recycling.

   Activity example: In history classes, students participate in discussions about justice. They relate historical events to present-day situations, and discuss how they can choose to participate.
MIDDLE SCHOOL CURRICULUM

Visual Art

The art program at Lexington Montessori School is based on the premise that all children are natural artists and have an artistic voice. By modeling respect for the individual and providing a more in-depth approach to artistic exploration, students in the Middle School program are encouraged to experiment with self-expression and to explore the artistic process. Students are encouraged to think creatively, to use their “right brains,” and to take risks with ideas and materials. Mistakes become opportunities to reevaluate artwork and to try a new direction in creating. Students actively engage in Visual Thinking Strategies to expand their visual literacy.

On the Middle School level, students take a more in-depth approach to learning about advanced elements of drawing and painting, printmaking, form and sculpture. The Middle School students develop art skills through deeper explorations of work, often over an extended period/semester on one theme. They reflect on their progress through group critiques and continual self-assessments. Students keep a sketchbook and have regular drawing practice for homework. A subscription to Scholastic Art Magazine provides opportunities for discussions in art class, and helps students foster visual literacy and critical thinking skills.

The Art Show is a celebration of the wonderful artwork done by each child in the LMS community and takes place during May and the first week in June. The Middle School students help to plan the reception and presentation of their community art project for the art show.

Learning Objectives and Activity Examples may include:

1. Students will explore a variety of methods, materials, and techniques in both two- and three-dimensions.

   Activity Example: Drawing - Students explore a range of drawing tools, practice drawing each week for homework, and create form and volume though further experiments with crosshatching and use of value (shading).

   Activity Example: Painting - Students use acrylic paint to show volume in a piece of fruit.

   Activity Example: Clay - Students learn more advanced techniques for hand building with clay, including use of the slab roller.

2. Students will experiment with elements and principles of design using color, line, texture, shape and form, pattern and symmetry, and space and composition.

   Activity Example: Using art elements and a square format, students create a design for a cell and make an abstract painting.

   Activity Example: Students create a plaster mask as a self-portrait, and use art elements to express the inside and outside of themselves.

3. Students will create art from direct observation.
Activity Example: Students practice drawing by observing items assigned or chosen in their art sketchbooks as homework.

Activity Example: Students create a still life, and after doing a careful value study, they paint a section of the still life in acrylics.

Activity Example: Students choose one peanut from a tray, and draw their peanut carefully that they can find it again from the tray full of 100 peanuts.

4. Students will brainstorm and use imaginative thinking throughout the artistic process.

Activity Example: After collecting ideas and brainstorms from the whole school community, students refine the ideas, create and paint a community mural for the school.

Activity Example: Using personal photographs, students use Photoshop to combine two or more of their photos to create a self-portrait.

5. Students will express ideas, emotions, and beliefs through their art.

Activity Example: Students choose materials and build a doll or puppet as a self-portrait to express their ideas of themselves.

6. Students will apply analytical and critical thinking to respond to works of art.

Activity Example: Students interact with works of art and discuss their ideas using the Visual Thinking Strategies curriculum.

Activity Example: Using Scholastic Art Magazine, students discuss artists and their work in class.

Activity Example: Students regularly critique their own and others drawings in class.

7. Students will investigate the cultural and historical contexts of the arts.

Activity Example: Students look at photographers such as Steiglitz, Adams, Arbus, and Leibowitz from different periods to inspire their photographs.

Activity Example: Students review muralists from both local and historical perspectives when planning their mural. We study the Philadelphia Mural Project and invite local muralist Josh Winer to talk about his work and to advise us. We discuss Shepherd Fairey and issues of graffiti art, public art, and the law.

8. Students will connect the arts with other classroom curricula.

Activity Example: Students use information from the study of cell structures in Science to create an abstract design for a painting.

Activity Example: In conjunction with creating a personal value list in the classroom, students create and glaze a clay frame to mount their work.

9. Students will participate in the community’s cultural and artistic life.

Activity Example: Students participate in and display their work in the annual LMS Art Show at the end of the year.

Activity Example: After collecting ideas from the whole school community, students plan, and paint a mural for the campus.
**Activity Example:** Students help plan the Art Show Reception and the “unveiling” of their mural.