

# MIDDLE SCHOOL (6-8) COURSE CATALOG



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# Language Arts

## **M/J Language Arts 1**

### **6<sup>th</sup> Grade**

This course follows the Common Core Standards for 6th grade English.

The course has goals for the areas of reading, writing, speaking and listening, and language in an effort to make students able to read and write confidently in all subject areas. In the area of reading students will learn to see how text supports their analysis and how a story's plot can proceed in small steps carried by the response of characters.

They will learn how the meaning of words can change based off of how they are used and to analyze how specific sentences add to the development of the theme or plot. The students will be able to describe how the experience of reading a text differs from that of listening to the text or watching a live performance based on the text. Throughout the course students will develop proficiency in writing argumentative, informative, and narrative texts. They will learn to clearly show and develop their topic or theme with proper language and grammar. Students will also learn more about the editing and revising process for their essays. The students will learn how to conduct research in order to answer a question, gathering information from various but accurate sources. They will be able to support their writing using evidence found in other texts. To develop their speaking and listening skills students will practice presenting their own claims by giving their ideas in a logical order. They will also learn to use various multimedia components in their presentations and to give their presentations using strong speaking skills such as appropriate eye contact and clear pronunciation. The students will learn how to collaborate with others on grade level appropriate content by coming to discussions prepared and following rules for friendly discussions.

In all aspects of their writing and speaking students will show an appropriate command of the English language, particularly in terms of pronoun usage. Students will focus on using appropriate punctuation and spelling throughout their writing.

See more: <https://www.foresttrailacademy.com/sixth-grade-english-course-curriculum.html>

## **M/J Language Arts 3**

### **8<sup>th</sup> Grade**

This course adheres to the Common Core Standards for 8th grade English. The course has goals for the areas of reading, writing, speaking and listening, and language in an effort to make students able to read and write confidently in all subject areas.

In the area of reading students will be able to determine the main idea of a text and analyze the text using specific lines from the text and/or dialogue add to the story and support their analysis. The students will continue to practice using context clues to determine the meanings of words, but will also learn to use these clues to deduce

## **M/J Language Arts 2**

### **7<sup>th</sup> Grade**

This course is aligned with the Common Core Standards for 7th grade English.

The course has goals for the areas of reading, writing, speaking and listening, and language in an effort to make students able to read and write confidently in all subject areas. In the area of reading students will further develop their abilities to determine a text's main ideas and to analyze them based off of textual evidence. They will learn to analyze how an author organizes their text and the purpose of the chosen point of view. The students will develop the skills to compare and contrast the written and multimedia versions of a text, and how different writers approach the same topic. In terms of writing, the students will continue to develop their skills in writing argumentative, informative, narrative, and research texts. They will be able to produce clear writing that has appropriate organization and style for the topic at hand. The students will learn to use technology to produce and publish their writing and to link and cite sources.

The students will continue to develop their research skills by drawing evidence from different texts that support their own writing. To develop their speaking and listening skills students will learn to ask good questions that lead to group discussion and to modify their own views in accordance with new information and ideas expressed by those around them.

The students will also practice speaking in front of a group while using relevant descriptions, facts, and details to support an opinion. Throughout their writing and speaking students will continue to show their command of the English language, particularly in the uses of phrases and clauses and varied types of sentences. While writing students will continue to practice conventions, specifically the use of commas to separate coordinate adjectives.

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figurative or connotative meanings. They will also learn to compare two different types of texts and discuss how those differences impact the meaning of the texts. Point of view will be understood as a way to change the connotations of a text.

After completing this course students should be able to read and understand various types of literature appropriate for their grade level. In the area of writing the students will become adept at writing argumentative, informative, narrative, and research essays. They will learn to use clear and easy to understand writing with style and function appropriate to their topic. The students will learn how to revise and improve their writing using guidance from peers. The students will learn to research topics using valid and varied sources to gather important information. The proper use of citations and paraphrasing will be emphasized. The students will learn to use texts they have read in order to support their opinions and arguments in a logical way. To improve their speaking and listening skills students will learn to effectively engage in collaborative discussions and analyze information presented in various media and formats. They will learn to evaluate the soundness of reasoning in a speaker's argument and claims.

Students will also learn to present their own claims and arguments in logical and coherent ways. They will be able to show a command of formal English language in order to support their claims. Throughout their writing and speaking students will demonstrate their command of English grammar and writing conventions.

See more: <https://www.foresttrailacademy.com/eighth-grade-english-curriculum-course.html>

# **Mathematics**

## **M/J Mathematics 6<sup>th</sup> Grade**

To satisfy the Common Core Standards for 6th grade mathematics this course focuses on four critical areas. First, students will learn to connect the ideas of ratio and rate to multiplication and division. If they can view ratios and rates as originating from and extending pairs of rows or columns the connection with multiplication and division allows students to expand on their skills. Second, the students will complete their understanding of the division of fractions and of the system of rational numbers, including negative numbers. They will understand the order and absolute value of rational numbers and the location of points on the four quadrants of the coordinate plane. Third, the students will learn to write and understand expressions and equations. The students will become able to write equations and expressions that describe a given situation. They understand that the solutions of an equation are the variables that make the equation true. The students learn to solve simple one-step equations and can create tables to describe the relationships between values. Fourth, the students will begin to develop an understanding of statistics. They will understand that data distribution may not have a definite center and that different methods of measurement can provide different values. The students will learn how to use and calculate the mean and median of a group of numbers. They learn how the measurement of variability helps to describe a set of data.

See more: <https://www.foresttrailacademy.com/sixth-grade-mathematics-curriculum.html>

## **M/J Pre-Algebra 8<sup>th</sup> Grade**

This course is aligned with the Common Core Standards for 8th grade mathematics and focuses on three critical areas. First, the students will learn to formulate expressions and equations, show the association of data with a linear equation, and to solve linear equations. The students will become comfortable using the linear equation,  $y = mx + b$ . They will understand that  $m$  represents the rate of change of the two variables. In addition they will understand the graphs are lines through the origin. The students will become comfortable using a linear equation to describe the relationship between two values in bivariate data. They will also be able to solve problems with one linear equation and systems with two linear equations. Second, the students will learn to understand functions and to use a function to describe quantitative relationships. They will understand that functions help to describe situations where one quantity is dependent on another. Third, the students will learn to assess two- and three-dimensional shapes using distance, angle, and similarity using ideas about distance and angles and how they behave. The students will understand the Pythagorean Theorem and be able to explain why it is true. They will learn to use the theorem

## **M/J Mathematics 7<sup>th</sup> Grade**

This course follows the Common Core Standards for 7th grade mathematics and focuses on four critical areas. First, the students will develop an understanding of proportional relationships. They will use their understanding of ratios to develop an understanding of proportionality and solve single- and multi-step problems. The students will learn to use their understanding to solve a wide variety of percent problems. Students will learn how to graph proportional relationships and calculate and describe the slope of the line as a property used to describe a relationship. Second, the students will learn to understand operations with rational numbers and begin to work with expressions and linear equations. They will solidify their understanding of fractions, decimals, and percents as different ways to represent rational numbers. The students will become proficient in the addition, subtraction, multiplication, and division of negative numbers. Third, the students will learn to use two- and three-dimensional shapes to solve problems regarding area, surface area, and volume. They will continue to develop their understanding of area and circumference of a circle and surface area of three-dimensional objects. The students will use cross-sections of three-dimensional figures to relate the figures to two-dimensional shapes. Fourth, the students will learn to draw conclusions about populations based on samples. They will be able to compare data distributions to answer questions about different populations.

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to find distances between points on the coordinate plane, to find lengths, and to analyze triangles. The students will complete their study of volume by learning to solve for the volume of cones, cylinders, and spheres.

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# Science

## **M/J Comprehensive Science 1      6th Grade**

In fulfillment of Florida's Next Generation Sunshine State Standards for 6th grade science, this class covers several different types of science such as physical science, ecology, and climatology. The students will learn about what scientists do and the similarities and differences between theories and laws. After reviewing the steps of the scientific method the students will design and conduct a scientific experiment. Students will discover what matter and atoms are made of and will learn how to read the periodic table. The class reviews the topics of force and motion, including Newton's laws of motion. The students will review the different types of energy and will learn about how energy is measured. Ecology is introduced to students as they learn about abiotic and biotic factors. The students will learn about how cells were discovered and will learn the basics of cell theory. Students will review major organ systems as they learn about how living things are organized. The students will learn about earth science, the water cycle, and the rock cycle. Finally, the students will learn about climate and how weather patterns are formed. They will also learn about the composition and function of the atmosphere.

*See more:*

<https://www.foresttrailacademy.com/sixth-grade-science-curriculum.html>

## **M/J Physical Science      8th Grade**

This course follows Florida's Next Generation Sunshine State Standards for 8th grade science. This course offers a more in depth look at physical sciences, such as chemistry, physics, and astronomy. The students will review the nature of science and the steps of the scientific method. The students will then learn what matter is and will review its phases. They will learn about elements and atoms, including the structure of and organization of atoms. The students will then learn about how and why atoms join together to form compounds and molecules. They will then learn the differences between mixtures and solutions and how a solution can be described. The students will then learn about the different types of chemical reactions that can occur. Radioactivity and radioactive isotopes will be explored so that the students will learn what they are and how radioactive exposure is changed by distance and time. The students will then learn about the different types of energy and how energy can be transformed from one type to another. They will explore work and simple machines, along with forces and motion. The students will learn about the properties of magnetism and electricity and how they are related to each other. The differences between temperature and heat will be explained while the students learn about how heat travels. Students will also learn about the nature of

## **M/J Comprehensive Science 2      7th Grade**

This course is aligned with Florida's Next Generation Sunshine State Standards for 7th grade science. This class focuses mainly on life sciences, with additional discussions of scientific inquiry and energy. The students will review the nature of science and how to design an effective experiment. They will practice using the scientific method in order to answer a question about their lives. The students will then learn about sound and light, including why light reflects and why some materials allow light to pass through while others do not. They will then learn about energy transformations and the first and second laws of thermodynamics. The rock cycle and the types of rock, including what they tell us about the Earth's history, are then discussed. The students will learn how and why the Earth changes through events like earthquakes and volcanoes. They will then learn about ecosystems, how much they can support and why, and how they can be damaged. The students will also learn about how organisms can interact with each other in terms of biodiversity and symbiosis. The flow of energy in ecosystems is explained through the interpreting of food chains and food webs. The students will then learn about how organisms and species evolve over time through natural selection and in response to changes in the environment. Finally, the students will learn about heredity and reproduction, including how to use a Punnett square to predict the traits of offspring.

*See more:*

<https://www.foresttrailacademy.com/seventh-grade-science-curriculum.html>

light and why some materials absorb light while others do not. They will review the process of photosynthesis, including how the process came to be understood by scientists. Finally, the students will learn about the universe, including the stars, the Sun, and theories of the origin of the universe.

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# **Social Studies**

## **M/J World Cultures 6<sup>th</sup> Grade**

This course follows Florida’s Next Generation Sunshine State Standards for 6th grade social studies. The course begins with a short review of geography and how to read maps correctly. The rest of the class focuses on ancient civilizations, their cultures, and their histories. The students first learn about the very first civilizations such as the Sumerians and the Babylonians. Next the students learn about ancient Egypt, including the old, middle, and new kingdoms. They will then learn about ancient Israelites, including the lost tribes of Israel. The students then learn about ancient Greece and its impact on architecture, athletics, and medicine. Ancient India will be discussed next along with the idea of caste as a cornerstone of a civilization. The students will also learn about ancient China and the various dynasties and their impact. Ancient Africa is also studied, particularly the great cities of Timbuktu and Zimbabwe. Finally, the students will learn about ancient Rome. They will learn about the daily life of Romans, the culture of the time, and the fall of Rome.

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## **M/J United States History 8<sup>th</sup> Grade**

This course follows Florida’s Next Generation Sunshine State Standards for 8th grade social studies. This course focuses on the history of the United States from exploration and colonization to reconstruction after the Civil War. It also covers an overview of economics and civics. The students will learn about the different European colonies formed in America and will compare the characteristics of different colonies. They will learn about the American Revolution and the founding principles of the United States. The students will study the westward expansion of the country and its national and international causes. They will learn about the causes of the Civil War, the major battles of the war, and its effect on the country. The students will then learn about the types of economy and what type of things will impact economies. Finally, the students will learn about what it means to be a citizen and the rights and responsibility that come along with citizenship.

See more: <https://www.foresttrailacademy.com/eighth-grade-social-studies-curriculum.html>

## **M/J Civics 7<sup>th</sup> Grade**

This course follows Florida’s Next Generation Sunshine State Standards for 7th grade social studies. This course focuses on the government of the United States, including federal, state, and local governments. The students will learn about the rights, duties, and liberties that come along with citizenship. They will learn about the documents and values that the American government is founded on. The students will learn about the federal government, including the three branches and their purposes. Next the students will learn about state and local governments and how they shape laws. The students will learn about elections, political parties, and the history of voting rights. American’s foreign policy will be explained, along with how the United States takes on global issues. Finally, the students will learn about economics, the three main types of economics, and supply and demand.

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