LOWELL CATHOLIC ELEMENTARY SCHOOL



CURRICULUM OVERVIEW

1ST - 6TH GRADE

ABOUT LOWELL CATHOLIC

LOWELL CATHOLIC ELEMENTARY SCHOOL

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Our Identity

Lowell Catholic is a Xaverian Brothers Sponsored School within the Archdiocese of Boston committed to providing a challenging Catholic education to students with diverse academic, social, cultural, and economic backgrounds.

Mission Statement

As a community, Lowell Catholic challenges and supports its students as they work to:

EXCEL in their academic efforts and hold learning in high esteem

PREPARE for productive lives as active members of their future communities

LIVE Jesus' message to love God, our neighbors and ourselves

Our Philosophy of Action

A genuine community, the members of Lowell Catholic are instilled with a sense of pride as they allow themselves to be formed by God through the common, ordinary, unspectacular flow of everyday life…

In carrying out our Mission and Catholic identity, Lowell Catholic promotes:

- A diverse community that is accepting, respectful and understanding of all cultures, faiths, and viewpoints.
- A welcoming environment that fosters an engaged staff, who participates in all aspects of student life and is committed to our mission.
- A commitment to serve Lowell Catholic and our extended communities by actively living Jesus' model and message.
- Growth that encompasses the whole person spiritually, intellectually, socially, emotionally, physically and creatively.
- The building of a community of faith that nurtures and sustains the spiritual values of humility, trust, zeal, compassion and simplicity within each other.
- Teaching that is intellectually sound, fair, and personally engaging, all which encourage and challenge students to be independent thinkers, effective communicators, and skillful team members.
- The growth and understanding of moral values and personal responsibility as a means to build honorable character.

Benefits of a Preschool - 12th Grade School

There are significant advantages to the Preschool through 12th grade school model. The opportunities for enhanced curriculum continuity, collaboration among teachers and shared resources across grade levels ensure students experience seamless transitions from one year to the next. Students graduate from the 8th grade with the skills, knowledge and self-discipline to be successful in high school and beyond.

Benefits of a Xaverian Education

In keeping with the Xaverian tradition, all children are viewed with great giftedness and are encouraged to share their giftedness with others. Lowell Catholic's academic program allows students to progress from one developmental stage to the next with confidence. The faculty instills in children a genuine love of learning by allowing students to be active participants in the learning process. Committed to teaching to the whole child, the school environment allows children to discover their gifts and talents while providing them with strategies to reach their potential.

Program Overview

Lowell Catholic places the highest priority on an individualized approach to learning. Our educational focus is directed toward spiritual growth, academic excellence, character development and leadership skills. Faculty and staff are committed to instilling independent thinking and effective communication. An emphasis is placed on building relationships within a community of faith that nurtures and sustains the spiritual values of humility, trust, zeal, compassion and simplicity for all of its members. Lowell Catholic's curriculum extends beyond the STEM (Science, Technology, Engineering and Math) model to be a STREAM school. In this way, Lowell Catholic expands the project-based, inquiry-driven STEM model into the areas of religion and the arts. This approach allows us to closely align our curriculum with our mission as a Catholic school.

CURRICULUM OVERVIEW

Theology Program Preschool through 8th Grade

Students from Pre-K through 8th grade have theology class 5 days per week. We have chosen Loyola Press' *Finding God* program to serve as the foundation for the content being presented, taught and explored. All theology classes aim to not only help students gain knowledge and improve academic skills, but more importantly, they aim to have students deepen their faith by: loving one another, serving the poor, praying together and drawing inspiration from saints and other role models. It is through this deepening of their faith that allows our students to be more aware of God's presence within themselves, others and the world around them.









Grade 1 Curriculum Overview

ENGLISH LANGUAGE ARTS IN FIRST GRADE (INTO READING & FUNDATIONS)

The ELA curriculum at Lowell Catholic focuses on four major strands, as outlined by the Massachusetts State requirements: reading, writing, speaking and listening, and language. Our 1st grade program utilizes Wilson's Fundations program and the Into Reading program to ensure that our students are developing the critical skills for reading, spelling and writing. Our 1st grade ELA program teaches our students to:

- Continue to develop social-emotional skills that support learning
- Identify basic parts of speech
- Identify grade level high-frequency words
- Decode words with short and long vowels, digraphs, blends, glued sounds and suffixes
- Practice vocabulary development in reading, writing, speaking and listening
- Learn, practice and apply printing skills
- Use context clues to develop comprehension skills
- Write in complete sentences using capitalization, proper spacing, and punctuation
- Create and orally present reports
- Develop effective communication skills

MATH IN FIRST GRADE (GO MATH)

Our 1st grade teachers strive to provide our students with math lessons that connect to the real-world and to the students' interests. The 1st grade math program emphasizes fundamental math skills crucial to continued math education. Our teachers utilize the Go Math program to ensure that our students are developing their conceptual, procedural and application skills. The 1st grade math program teaches our students to:

- Learn to use addition and subtraction within the numbers 0-20
- Have a deeper understanding of the counting sequence, with a particular attention to base 10 and place values, as well as their roles in addition and subtraction
- Use a Hundreds chart to add and subtract.
- To use measurement tools and order length from shortest to longest.
- Learn to tell and write time to the hour and half hour.
- Manipulate two-dimensional and three-dimensional shapes and classify them according to their properties
- Read and represent data using bar graphs, picture graphs, and tally charts.

SCIENCE IN FIRST GRADE (INSPIRE)

In science, our students experience hands-on learning as well as field-based learning. A strong emphasis is placed on developing the scientific skills of observing, inferring, predicting, classifying, making models and communicating. Lowell Catholic teachers create a learning environment that addresses individual needs, sparks creativity and fosters a love of learning. Our 1st grade teachers utilize the Studies Weekly science program to teach the curriculum content using a periodical format.

Our 1st grade science program teaches students to:

- Understand the roles of a scientist and engineer and the importance of teamwork in the engineering design process.
- Have a deeper understanding of light and sound. Students explore features of sound and sources of light.
- Understand the structure and function of plants and animals. Students learn that plants and animals live in different habitats and have parts that help them survive.
- Identify patterns and cycles within space systems. Students learn about the daytime and nighttime sky, phases of the moon, objects in space, and seasons.

SOCIAL STUDIES IN FIRST GRADE (STUDIES WEEKLY)

In 1st grade, students will listen to and read folk tales and true stories from America and around the world. They will learn about major historical events, figures and symbols related to the United States of America and our national holidays and why they are important to us as Americans. The 1st grade curriculum continues to strengthen children's sense of civic responsibility, which was initially introduced in Pre-K and kindergarten. Our 1st grade teachers utilize the Studies Weekly social studies program to teach the curriculum content using a periodical format. The 1st grade social studies program teaches students to:

- Engage students in learning about community, government, and their role as citizens of a community. Students learn that they belong to a family community, school community, and local community.
- Learn that rules and laws teach us how to learn, work, and play together.
- Identify various national holidays that celebrate important people and events. They will also learn about how national symbols remind us of our liberty and freedom.
- Understand that we may have different views, but we can work together for fairness, equality, and the common good.
- Students will examine important documents such as the Document of Independence, Constitution, and the Bill of Rights.
- Understand that taxes pay for government services that keep us safe and healthy.
- Learn about maps and globes. Students will learn to use cardinal directions and the compass rose to read a map. Students will learn about physical characteristics of a place including continents, oceans, landforms, and bodies of water.
- Students will understand how and why families, neighborhoods, and communities have changed over time.
- Students will explore various aspects of culture.
- Students will gain a basic understanding of economics. They will identify needs and wants as well as spending and saving money.

SPECIALS IN FIRST GRADE

Our 1st grade program offers our students the following specials:

- Art
- Library and Technology
- Music
- Physical Education
- Spanish





Grade 2 Curriculum Overview

ENGLISH LANGUAGE ARTS IN SECOND GRADE (INTO READING & FUNDATIONS)

The ELA curriculum at Lowell Catholic focuses on four major strands, as outlined by the Massachusetts State requirements: reading, writing, speaking and listening, and language. Our 2nd grade program utilizes Wilson's Fundations program and the Into Reading program. Our 2nd grade teachers use these curricular resources to ensure that our students are developing the critical skills for reading, spelling and writing. The 2nd grade ELA program teaches our students to:

- Continue to print and spell grade-level and high frequency words
- Pronounce and understand the meaning of words through context clues, phonemic awareness and language sense
- Decode words with short and long vowels, digraphs, blends, glued sounds, base words and suffixes
- Effectively use expanded vocabulary in written and oral communication
- Identify more parts of speech
- Analyze the similarities and differences between fiction, non-fiction, fairy tales, poetry, etc.
- Compare and contrast two or more versions of the same story
- Describe how characters in a story respond to major events or challenges
- Recognize the elements of a complete sentence
- Memorize and recite a poem
- Write a complete paragraph

MATH IN SECOND GRADE (GO MATH)

Our 2nd grade teachers strive to provide our students with math lessons that connect to the real-world and to the students' interests. Our teachers utilize curricular resources from Go Math to ensure that our students are developing their conceptual, procedural and application skills. Our 2nd grade math program teaches our students to:

- Have a deeper understanding of addition and subtraction with number groupings in order to introduce the concept of multiplication
- Mentally add 10 to any given number between 100-900
- Solve 1 and 2 step word problems using addition and subtraction as well as by drawing diagrams and using equations
- Understand the value of coins and bills to find the total value of a group of money
- How to read times shown on analog and digital clocks
- Have a deeper knowledge about place value and add and to subtract numbers with more place values
- Read and write numbers to 1000
- Compare 3-digit numbers to determine if greater than, less than or equal to
- Evaluate objects in terms of measurement and data, including with monetary measurement and units of time
- Identify more shapes and describe their different attributes as foundations for geometry

SCIENCE IN SECOND GRADE (INSPIRE)

In science, students experience hands-on learning as well as field-based learning. A strong emphasis is placed on developing the scientific skills of observing, inferring, predicting, classifying, making models and communicating. Our 2nd grade Inspire Science teaches our students to:

- Students will explore changes to Earth's Landscape, such as changes to rocks and landforms and quick changes to Earth's landscape such as earthquakes and volcanoes
- Map landforms and bodies of water and observe that flowing water and wind shapes these landforms(hills, valleys, mountains, plains) and (streams, ponds, and rivers)
- Students will investigate different kind of materials by their observable properties
- We learn what plants need to survive
- Students will explore changes to different materials through heating and cooling
- Understanding the properties of materials
- Use their observation skills gained in earlier grades to classify materials based on similar properties and functions
- Students will explore local, land, and water habitats
- Make observations of plants and animals to compare the diversity of life in different habitats

SOCIAL STUDIES IN SECOND GRADE (STUDIES WEEKLY)

Our Social Studies curriculum is Studies Weekly where students learn about their communities, citizenship, the government, and cultures/environments around the world. Students are supported with both hands-on texts as well as online resources to help them better understand the curriculum.

- Engage students in learning about community, government, and their role as citizens of a community
- Learn more about the purpose of government and the rights and responsibilities of citizens
- Introduce the idea of patriotism and how we demonstrate our patriotism through national symbols, holidays, and events
- Discuss the important documents of the United States, including the Declaration of Independence, the Constitution, and the Bill of Rights
- Locate the oceans of the world on a map
- Locate the continents of the world on a map
- Explain the difference between a country and continent
- Locate five major rivers in the world
- Locate major mountains or mountain ranges

SPECIALS IN SECOND GRADE

Our 2nd grade program offers our students the following specials:

- Art
- Library and Technology
- Music
- Physical Education
- Spanish



Grade 3 Curriculum Overview

ENGLISH LANGUAGE ARTS IN THIRD GRADE (INTO READING & HANDWRITING WITHOUT TEARS)

The ELA curriculum at Lowell Catholic focuses on four major strands, as outlined by the Massachusetts State requirements: reading, writing, speaking and listening, and language. Our 3rd grade program utilizes the Into Reading reading program and Handwriting Without Tears to continue to develop these critical skills. Our 3rd grade ELA program teaches our students to:

- Read grade-appropriate irregularly spelled words
- Decode multisyllabic words
- Ask and answer questions to demonstrate understanding of a text referring explicitly to the text as the basis for their answers.
- Explain how specific aspects of a text's illustrations contribute to what the text is conveying
- Read and comprehend literature including stories, drama and poetry at the high end of grades 2-3 text complexity
- Determine the main idea of a text, recount the key details and explain how they support the main idea
- Read and comprehend informational texts
- Write narratives to develop real or imaginative experiences
- Write opinion pieces on topics or texts, supporting a point of view with reasons
- Write poems and stories using figurative language
- Conduct a short research project that builds knowledge on a topic
- Build cursive writing skills

MATH IN THIRD GRADE (GO MATH)

Our 3rd grade teachers strive to provide our students with math lessons that connect to the real-world and to the students' interests. Since a strong foundation has been built in mathematical fundamentals prior to 3rd grade, students will now solve problems using multiplication and division. Using the four basic operations (addition, subtraction, multiplication and division) they will explain patterns in these operations. Multi-digit arithmetic is performed and fractions are also introduced to students. Students build on previous knowledge of measurement data and will also focus on mass, liquid volumes and geometric measurement tools connected to the new skill of multiplication (area and perimeter). Our teachers utilize curricular resources from Go Math to ensure that our students are developing their conceptual, procedural and application skills. Our 3rd grade math program teaches our students to:

- Interpret products of whole numbers
- Interpret whole-number quotients of whole numbers
- Know from memory all products of two one-digit numbers
- Solve 2-step word problems using all 4 operations
- Use place value knowledge to round whole numbers to the nearest 10 and 100
- Apply properties of operations
- Fluently multiply and divide within 100

- Solve word problems involving addition and subtraction of time intervals
- Understand fractions (parts and comparing fractions)
- Represent and interpret data
- Understand concepts of area and to relate area to multiplication and addition

SCIENCE IN THIRD GRADE (INSPIRE)

In science, students experience hands-on learning as well as field-based learning. A strong emphasis is placed on developing the scientific skills of observing, inferring, predicting, classifying, making models and communicating. Our teachers create a learning environment that addresses individual needs, sparks creativity and fosters a love of learning. Our 3rd grade Inspire Science program teaches our students to:

- Develop and sharpen their skills by obtaining, recording, charting and analyzing data in order to study their environment
- Use these practices to study the interactions between humans and earth systems, humans and the environment and humans and the designed world
- Identifying the parts, similarities, and differences between life cycles of different species
- Understand that these entities not only interact but influence behaviors, reactions and traits of organisms
- Analyze weather patterns and consider humans' influence and opportunity to impact weather-related events
- Understand the interactions between and influence of the environment and human traits and characteristics
- Use the engineering design process to identify a problem and design solutions that enhance humans' interactions with their surroundings and to meet their needs
- Consider the interactions and consequent reactions between objects and forces, including forces that are balanced or not
- Reason and provide evidence to support arguments for the influence of humans on nature and nature on human experience

SOCIAL STUDIES IN THIRD GRADE (STUDIES WEEKLY)

Our Social Studies curriculum is Studies Weekly where students learn about their communities, the government, and cultures/environments around the world. Students are supported with both hands-on texts as well as online resources to help them better understand the curriculum. Our 3rd grade social studies program teaches our students to:

- Engage students in learning about community, government, and their role as citizens of a community
- Learn more about the purpose of government and the rights and responsibilities of citizens
- Learn the definition of primary and secondary sources, including the type of sources and how to analyze various sources
- Introduce the idea of patriotism and how we demonstrate our patriotism through national symbols, holidays, and events
- Examine the important documents of the United States, including the Declaration of Independence, the Constitution, and the Bill of Rights
- Introduce students to the Five Themes of Geography, including location, place, human/environment interaction, movement, and region

SPECIALS IN THIRD GRADE

Our 3rd grade program offers our students the following specials:

- Art
- Library and Technology
- Music
- Physical Education
- Spanish

Grade 4 Curriculum Overview

ENGLISH LANGUAGE ARTS IN FOURTH GRADE (INTO READING & HANDWRITING WITHOUT TEARS)

The ELA curriculum at Lowell Catholic focuses on four major strands, as outlined by the Massachusetts State requirements: reading, writing, speaking and listening, and language. Our 4th grade program utilizes the HMH Into Reading program and Handwriting Without Tears to continue to develop these critical skills. Our 4th grade ELA program teaches our students to:

- Restate the main idea and support it with text-based evidence
- Designate a cause and effect in a selection
- Identify and explain the importance of foreshadowing clues
- Identify similarities between events in the author's life and what he/she has written
- Use reading comprehension strategies such as: recalling, comparing and classifying information
- Use context clues to identify and use correctly: synonyms, antonyms, homonyms, homographs and multiple-meaning words
- Continue practicing cursive writing skills
- Recognize and edit poorly constructed sentences
- Develop the ability to organize ideas using paragraphs
- Summarize key facts and details during discussions

MATH IN FOURTH GRADE (GO MATH)

In 4th grade, instructional time focuses on three critical areas: (1) developing understanding and fluency with multi-digit multiplication and developing an understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures and symmetry. Our teachers utilize curricular resources from Go Math to ensure that our students are developing their conceptual, procedural and application skills. Our 4th grade math program teaches our students to:

- Interpret a multiplication equation as a comparison
- Solve multi-step word problems with whole numbers
- Know multiplication facts and related division facts through 12 x 12
- Reduce fractions to lowest terms
- Solve word problems using a variety of strategies
- Evaluate Algebraic expressions
- Apply multiplication and division skills to money
- Construct and interpret tables and graphs
- Predict the likelihood of an event occurring through conducting an experiment

SCIENCE IN FOURTH GRADE (INSPIRE)

In science, our students experience hands-on learning as well as field-based learning. A strong emphasis is placed on developing the scientific skills of observing, inferring, predicting, classifying, making models, and communicating. Our teachers create a learning environment that addresses individual needs, sparks creativity and fosters a love of learning.

Our 4th grade science program Inspire Science teaches our students:

- Energy and Motion which includes forces and motion, speed and energy, and energy transfers in collisions
- Using energy which includes energy and transfer, types of energy, sound and light, electricity, and heat.
- Natural resources in the environment which includes energy from nonrenewable and renewable resources, and the impact of energy use
- Earth and its changing features which include map earth's features, evidence from rocks and fossils, changes in landscapes over time
- Mapping and modeling earthquakes and reducing earthquake damage
- Structures and functions of plants and animals
- Information processing in animals

SOCIAL STUDIES IN FOURTH GRADE (STUDIES WEEKLY)

In 4th grade, students study the geography and people of the United States today. Students learn geography by addressing standards that emphasize political and physical geography and embed five major concepts: location, place, human interaction with the environment, movement and regions. In addition, they learn about the geography and people of contemporary Mexico and Canada. The geography and social characteristics of the nations in Central America and the Caribbean Islands may also be covered. Students may also study one early civilization in the first half of the school year. Our 4th grade teachers utilize Studies Weekly social studies program to teach the curriculum content. Our 4th grade social studies program teaches our students to:

- Locate North America on a map
- Locate the United States, the Atlantic and Pacific oceans and the Gulf of Mexico
- Describe the climate, major physical features and major natural resources in each region of the United States
- Learn about the different facets of geography and apply their understanding to the world around them
- Learn about the five themes of geography (locations, place, region, movement, and human-environment interaction.

SPECIALS IN FOURTH GRADE

Our 4th grade program offers our students the following specials:

- Art
- Library and Technology
- Music
- Physical Education
- Spanish





Grade 5 Curriculum Overview

ENGLISH LANGUAGE ARTS IN FIFTH GRADE (LITERATURE-BASED)

The ELA curriculum at Lowell Catholic focuses on four major strands, as outlined by the Massachusetts State requirements: reading, writing, speaking and listening, and language. Our 5th grade program utilizes the Journeys reading program and incorporates other literary works such as *The One and Only Ivan*, and *Bridge to Terabithia*. Some of the learning outcomes for our 5th grade ELA program are:

- Analyzing complex text and explaining their analysis
- Compare and contrast characters
- Identify the theme of a literary selection
- Discriminate between main and supporting details
- Demonstrate an understanding of plot, setting and characterizations
- Consistently demonstrate usage of subject/predicate agreement
- Write effectively in a variety of forms for different purposes
- Cite reference sources
- Deliver oral presentations using effective techniques
- Follow an organized process for research: Choose a topic, formulate research questions, collect/organize information and present findings.

MATH IN FIFTH GRADE (INTO MATH)

Our 5th grade teachers strive to provide our students with lessons that connect math to the real-world and to the students' interests. Following the Massachusetts State Frameworks for 5th grade math instructional time focuses on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths and developing fluency with whole number and decimal operations; and (3) developing understanding of volume. Our teachers utilize curricular resources from Into Math to ensure that our students are developing their conceptual, procedural and application skills.Some of the learning outcomes for our 5th grade math program are:

- To ensure that the students have mastered whole number placement value
- Use formulas to find perimeter, circumference, area and volume
- Add and Subtract fractions with unlike denominators
- Multiplying and dividing fractions: procedure and concept
- Multiply and divide decimals using the powers of 10
- Use estimation
- Problem solving using multiple strategies
- Understand ratios and proportions
- Begin to work with algebraic expressions and equations
- Find the mean, median, and mode
- Have a foundational understanding of coordinate planes and function tables

SCIENCE IN FIFTH GRADE (INSPIRE)

In science, 5th grade students experience hands-on learning as well as field-based learning. A strong emphasis is placed on developing the scientific skills of observing, inferring, predicting, classifying, making models and communicating. Our teachers create a learning environment that addresses individual needs, sparks creativity and fosters a love of learning. Some of the learning outcomes for our 5th grade science program are:

- Classifying invertebrates
- Understand plant growth, plant categories and adaptations
- Understand the different interactions that take place in an ecosystem
- Understand cells, tissues, organs and body systems
- Explain the function of muscles, tendons and ligaments
- Understand properties of matter
- Understand the difference between a physical and chemical change
- Distinguish between mixtures and solutions
- Describe the ways in which the earth's surface changes through: erosion, weathering, earthquakes and volcanoes.
- Explore and understand the ecosystems of the oceans

SOCIAL STUDIES IN FIFTH GRADE (THE UNITED STATES - PEARSON PUBLISHING)

As formulated in the Massachusetts State Frameworks, students in the 5th grade study the major Pre-Columbian civilizations in the New World; the 15th and 16th century European explorations around the world, in the western hemisphere and in North America in particular; the earliest settlements in North America; and the political, economic and social development of the English colonies in the 17th and 18th centuries. Students also study the early development of democratic institutions and ideas, including the ideas and events that led to the independence of the original 13 colonies and the formation of a national government under the U.S. Constitution. The purpose of the 5th grade curriculum is to give students their first concentrated study of the formative years of U.S. History. Some of the learning outcomes for our 5th Grade social studies program are:

- To describe the earliest explorations of the New World by the Vikings, the period and locations of their explorations and the evidence for them
- Identify the 3 major Pre-Columbian civilizations that existed in Central and South America and their locations
- Describe the political structures, religious practices and use of slave labor in Pre-Columbian civilizations
- Explain why trade routes to Asia were closed in the 15th Century and trace the voyages of certain explorers
- Understand and explain why the Aztec and Inca civilizations decline in the 16th century
- Describe the goals and extent of the Dutch settlement in New York, the French settlements in Canada and the Spanish settlements in Florida, the Southwest and California
- Identify some of the major leaders and groups responsible for the founding of the original colonies in NorthAmerica
- Explore the political, intellectual and economic growth of the colonies from 1700 to 1775

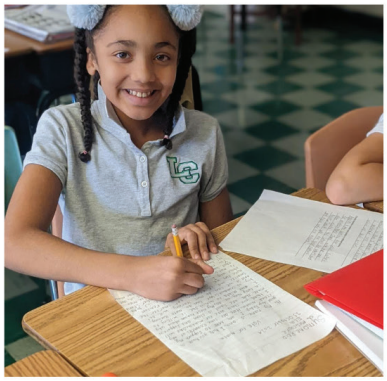
SPECIALS IN FIFTH GRADE

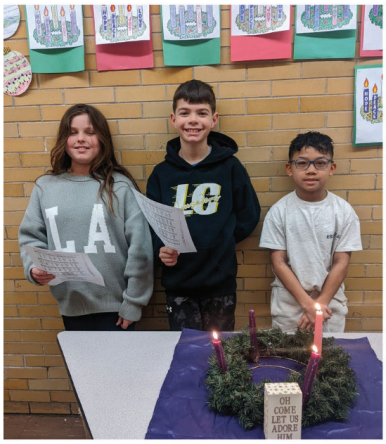
- Art
- Library and Technology
- Social/Emotional Wellness Class
- Music
- Physical Education
- Spanish
- STEM

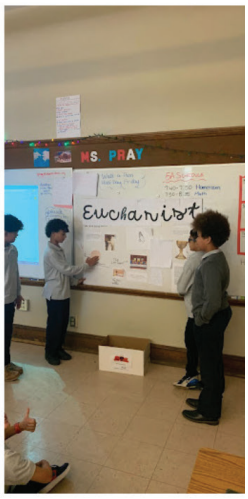
STEM

The goal of this STREAM course is to create a learning environment in which students are guided to produce original ideas, objects, and structures according to certain specifications using concepts and skills from math, science, religion, art and technology classes.In this course students will be using their minds and imaginations as they explore topics such as: how to more efficiently use the Google environment, computer programming, mechanical engineering and electricity. As we explore these topics students will engage in hands-on activities such as building a pom-pom catapult, create a Google Slide presentation about water and use electrical theory to light an LED bulb.








Grade 6 Curriculum Overview

ENGLISH LANGUAGE ARTS IN SIXTH GRADE (LITERATURE-BASED)

The 6th grade ELA curriculum at Lowell Catholic focuses on four major strands, as outlined by the Massachusetts State requirements: reading, writing, speaking and listening, and language. Our 6th grade program utilizes Prentice Hall's Common Core Literature Anthology and other literary works such as: *Ground Zero* and *The Insignificant Events in the Life of a Cactus*. Some of the learning outcomes for our 6th grade ELA program are:

- Determine a theme or central idea of a text
- Infer word meanings from context clues
- Decode accurately and show an understanding of new words
- Analyze character traits
- Provide text-based evidence to support comprehension of material
- Connect a literary experience to a personal experience
- Construct more complex, sophisticated sentences
- Use punctuation rules correctly
- Analyze poetry
- Organize ideas and information to create different types of compositions

MATH IN SIXTH GRADE (INTO MATH)

Following the Massachusetts State Frameworks established for 6th grade math instructional time focuses on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting and using expressions and equations; and (4) developing understanding of statistical thinking. Our teachers utilize curricular resources from Into Math to ensure that our students are developing their conceptual, procedural and application skills. Some of the learning outcomes for our 6th grade math program are:

- To understand ratio concepts and use ratio reasoning to solve problems
- Apply and extend previous understandings of multiplication and division to divide fractions by fractions
- Compute fluently with multi-digit numbers and find common factors and multiples
- Apply and extend previous understandings of numbers to the system of rational numbers
- Apply and extend previous understandings of arithmetic to algebraic expressions
- Reason about and solve one-variable equations and inequalities
- Represent and analyze quantitative relationships between dependent and independent variables
- Solve real-world and mathematical problems involving area, surface area and volume
- Develop understanding of statistical variability
- Summarize and describe distributions

SCIENCE IN SIXTH GRADE (ISCIENCE - MASSACHUSETTS EDITION)

In 6th grade science, our students experience hands-on learning as well as field-based learning. A strong emphasis is placed on developing the scientific skills of observing, inferring, predicting, classifying, making models,and communicating. Our teachers create a learning environment that addresses individual needs, sparks creativity and fosters a love of learning. Some the learning outcomes for our 6th grade science program are:

- To understand and explain the inner workings of cells
- Explain cell reproduction/mitosis
- Compare and contrast plant and animal cells
- Compare photosynthesis and respiration
- Understand the causes of extinction
- Learn about elements and compounds
- Explain acids and bases
- Learn about the origins of the earth
- Learn about plate tectonics
- Understand the causes of earthquakes and volcanoes

SOCIAL STUDIES IN SIXTH GRADE (DISCOVERING WORLD GEOGRAPHY -MCGRAW HILL)

Formulated by the Massachusetts State Frameworks, the focus of 6th grade social studies is the systematic study of the world outside of the United States and North America. Students will address standards that emphasize political and physical geography and embed five major concepts: location, place, human interaction with the environment, movement and regions. Students systematically learn geography around the world continent by continent, similar to the way in which atlases are organized. They also learn about each continent in an order that reflects, first, the early development of the river valley civilizations and then the later development of maritime civilizations in the Mediterranean area and in Northern and Western Europe. Doing so prepares students for the study of early civilizations around the Mediterranean area in 7th grade. Some of the learning outcomes for our 6th Grade social studies program are:

- Use map and globe skills learned in Preschool through 5th grade to interpret different kinds of projections, as well as topographic, land-form, political, population and climate maps
- Use geographic terms correctly, such as delta, glacier, location, settlement, region, natural resource, human resource, mountain, hill, plain, plateau, river, island, isthmus, peninsula, erosion, climate, drought, monsoon,hurricane, ocean and wind currents, tropics, rain forest, tundra, desert, continent, region, country, nation and urbanization
- Interpret geographic information from a graph or chart and construct a graph or chart that conveys geographic information (e.g., about rainfall, temperature or population size)
- Explain the difference between absolute and relative location and give examples of different ways to indicate relative location for countries or cities across the world
- Identify how current world atlases are organized and the kind of information they provide for each continent and country
- Identify what time zones are, when and how the precise measurement of longitude was scientifically and historically determined, the function and location of the international date line and the function of the Royal Observatory in Greenwich, England and give examples of differences in time in countries in different parts of the world
- Define what a nation is and give examples of the different ways nations are formed
- Give examples of several well-known international organizations (e.g., the North Atlantic Treaty Organization, the World Bank, the International Monetary Fund, The Commonwealth of Nations and the United Nations) and explain their purposes and functions
- Identify the key elements of a market economy

SPECIALS IN SIXTH GRADE

- Art
- Library and Technology
- Social/Emotional Wellness Class
- Music
- Physical Education
- Spanish
- STEM - Includes a STEM themed field trip to Fenway Park!

STEM

The goal of this STREAM course is to create a learning environment in which students are guided to produce original ideas, objects, and structures according to certain specifications using concepts and skills from math, science, religion, art and technology classes.In this course students will be using their minds and imaginations as they explore topics such as: how to more efficiently use the Google environment, computer programming, mechanical engineering and electricity. As we explore these topics students will engage in hands-on activities such as building a pom-pom catapult, create a Google Slide presentation about water and use electrical theory to light an LED bulb.



