

Grade Five ENGLISH LANGUAGE ARTS & LITERACY in the English Innovation Pathway and French Immersion

Students in grade five develop their reading and language arts skills through a balanced literacy approach. Students will be immersed in the National Geographic Reach for Reading program and will learn to apply skills in authentic literary and informational texts throughout the course of the year. The focus is on becoming strategic readers and developing and strengthening comprehension skills across all content areas. Students build their knowledge of content specific vocabulary to enhance oral and written language and grade level writing includes responding to literature, crafting narrative as well as expository/informational pieces. Engaging writing activities focus on the writing process, applying spelling rules, and conventions of standard English while developing style and voice.

Students will learn to:

- Develop the comprehension strategies and skills that make students more independent readers.
- Summarize key details of stories, poems, plays, and nonfiction materials, citing evidence of themes or main ideas.
- Identify and respond to literary techniques including figurative language.
- Construct in writing an insightful, focused topic with evidence that supports an idea in order to persuade.
- Use the writing process (pre-writing, drafting, revising, proofreading, and publishing) to compose stories, short essays, informational texts, or presentations.
- Use correct punctuation in writing, including quotations and commas to combine or expand, and reduce sentences to improve meaning, interest, and style of writing.
- Write opinions that present reasonable arguments and provide factual information in an organized structure to support the student's point of view.
- Locate and gather information for independent research, using a variety of materials (print & digital) including: glossary, dictionary, encyclopedia, atlas, almanac, graphs and timelines.
- Demonstrate the use of context clues to determine the meaning of new vocabulary for comprehension, and use in writing and speaking.
- Build knowledge of academic words.
- Participate in discussions using agreed upon rules, contributing accurate and relevant information; and elaborating and/or synthesizing ideas.
- Produce writing on the computer.

MATHEMATICS in the English Innovation Pathway and French Immersion

Everyday Mathematics is the curriculum program used for math instruction. Number skills and mathematics are linked to relevant situations and contexts in everyday life. Grade five students continue to focus on learning a variety of strategies to solve real life problems. Students expand their mathematical vocabulary while learning core concepts through hands on experiences and paper and pencil tasks

Students will learn to:

Operations and Algebraic Thinking

- Write and interpret numerical expressions.
- Analyze patterns and relationships.

Example: If $n = \frac{5}{13}$, what is the value of $\frac{2}{13} + n$?

Number and Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Examples: 44.7×4.3 $8 - 3 \times (1 + 3)$ 2.18×0.99 $42.66/5.4$

Number and Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Example: Katy was riding her bike home from school on Tuesday when she got a flat tire. At that point she had traveled $\frac{4}{15}$ of a mile on her bike. Katy walked her bike the rest of the way home, which was $\frac{5}{9}$ of a mile. How far did Katy travel from school to home on Tuesday?

The Number System

- Gain familiarity with concepts of positive and negative integers.

Measurement and Data

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: Understand concepts of volume and relate volume to multiplication and to addition.

Example: At Curtis' Deli, customers can choose the amount of deli meat on their sandwiches. The plot displays the amount of deli meat on each sandwich. How many total pounds of deli meat were used for the sandwiches?

Geometry

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties

Example: Classification of Quadrilaterals (Trapezoid, Isosceles, Parallelogram, Rhombus, Rectangle, Square)

Basic Math Facts & Computational Strategies

- Students will add and subtract decimals to the hundredths place using concrete models and strategies based on place value, properties of operations, and the relationship between addition and subtraction. Students will be able to relate their strategies to the written method and explain.
- Students will multiply and divide decimals to the hundredths place using concrete models and strategies based on place value, properties of operations and the relationship between multiplication and division.
- Student will be able to write and explain their strategy.
- Students will be able to fluently multiply multi-digit whole numbers using the standard algorithm.
- Students will be able to find whole-number quotients of whole numbers with up to 4-digit divisors, using strategies based on place value, properties of operations, and the relationship between multiplication and division.

HISTORY & SOCIAL SCIENCE in the English Innovation Pathway

The focus of the grade 5 curriculum is to give students their first concentrated study of the formative years of United States History. Students will study the early development of democratic institutions and ideas, including the ideas and events that led to the independence of the original thirteen colonies and the formation of a national government under the Constitution of the United States.

Students will learn to:

- Distinguish between types of maps, and those that show information such as climate, population etc.
- Give examples of the responsibilities of power associated with major federal, state and local officials.
- Explain the structure of town government in Milton.
- Describe the discovery and early colonization of America.
- Explain the influence that geography had on the early settlers and where they settled.
- Explain the reasons that the language, political institutions, and political principles of what became the United States were largely shaped by the English colonists even though other European nations also explored the New World.
- Explain the early relationships of the English settlers to the indigenous peoples in North America.
- Name and describe the political, social, and economic factors, which led to the colonists' quest for independence.
- Describe the role of Massachusetts in the War for Independence.
- Describe the responsibility of government, basic principles of American democracy, and explain how the Constitution and Bill of Rights reflect and preserve these principles for its citizens.

Thanks to the generous support of the Milton Foundation for Education, we will be enriching our Social Studies instruction with a literacy based enrichment curriculum meant to enhance students' social studies and literacy learning through increased opportunities for children to read, write, and speak about such sophisticated topics as democracy, equality, justice and fairness. Students begin to understand the connection between rules and law and are “***empowered to stand up for their beliefs, engage in respectful discourse, and resolve differences in constructive ways.***”- <http://discoveringjustice.org>

GENERAL SCIENCE in the English Innovation Pathway and French Immersion

Physical Science: Mixtures & Solutions

Chemistry is the study of the structure of matter and the changes or transformations that take place within those structures. Learning about the properties and behaviors of substances gives us knowledge about how things go together and how they can be taken apart. Learning about changes in substances can lead to the development of new materials and new ways to produce energy. The **Mixtures and Solutions** investigations introduce students to fundamental ideas in chemistry. In this module, students will:

- Make and separate mixtures, using screens, filters, and evaporation.
- Measure solids and liquids to compare the mass of a mixture to the mass of its parts.
- Use a balance to determine relative concentration. Layer solutions to determine relative density (concentration).
- Plan and conduct saturation investigations. Compare the solubility of substances in water.
- Identify an unknown substance based on the properties of solubility and crystal form.
- Observe and compare reactants and products of several chemical reactions.

Life Science: Living Systems

The **Living Systems** investigations focus on systems as the unit of study. The idea of a system is one of the grand integrating (cross-cutting) concepts that pervades all of science. Students start by looking at Earth as the interaction of four Earth systems or subsystems the geosphere, the atmosphere, the hydrosphere, and the biosphere. The focus of the module then turns to the biosphere as students explore ecosystems and organisms in terms of their interacting parts.

- Analyze everyday systems and subsystems.
- Analyze food chains and food webs as a way to study the biosphere.
- Make and analyze a worm habitat as a decomposition system.
- Investigate nutrient-getting systems of yeast, plants, and animals, including humans.
- Investigate and model transport systems in plants and animals.
- Investigate sensory systems in animals.

Earth and Space Science: Sun, Moon and Planets

The **Sun, Moon, and Planets** investigations focus on Earth's place in the solar system. In this module, students will

- Observe and compare shadows during a school day.
- Relate the position of the Sun in the sky to the size and orientation of an object's shadow.
- Use physical models to explain day and night.
- Record observations of the night sky.
- Observe and record changes in the Moon's appearance every day for a month.
- Analyze observational data to discover the sequence of changes that occur during the Moon's phase cycle.
- Make and interpret a model of the Earth, Moon, and Sun system.
- Classify planets by their various properties.
- Record and display the organization of the solar system graphically.
- Identify several constellations as stable, predictable patterns of stars.
- Use models to build explanations.

DIGITAL LITERACY and COMPUTER SCIENCE in the English Innovation Pathway

Elementary Scholars explore a variety of computing devices and digital tools and further develop their computational thinking problem solving skills.

The strands covered third through fifth grade include:

1. Computing and Society

- Safety and Security
- Ethics and Laws
- Interpersonal and Societal Impact

2. Digital Tools and Collaboration

- Digital Tools
- Collaboration and Communication

- Research

3. Computing Systems

- Computing Devices
- Human and Computer Partnerships
- Networks
- Services

4. Computational Thinking

- Abstraction
- Algorithms
- Data
- Programming and Development
- Modeling and Simulation

Incorporated Use of Technology as outlined in the Common Core English Language Arts:

Scholars in fifth grade will:

- Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Use technology, including the internet, to produce and publish writing as well as to interact and collaborate with others.
- Demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single setting.
- Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
- Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (graphic novel, multimedia presentation of fiction, folktale, myth, poem).
- Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
- Include multimedia components and visual displays in presentation when appropriate to enhance development of main ideas or themes.
- Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (headings), illustrations, and multimedia when useful to aiding comprehension.
- Consult reference materials (dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of keywords and phrases.

All Milton scholars in grades 2-12 are issued a Google account which gives them access to Google Apps for Education where they currently utilize Google Drive, Google Docs, Google Slides, Google Sheets, and Google Classroom.

Fifth graders are additionally utilizing: Typing.com, Various iPad apps including My Story, Tell About This, Write About This, Book Creator, Explain Everything, KidBlog and Digital Student Learning Journal-Seesaw.

Standards Based Report Cards- Year 2

The purpose of this report card is to communicate to parents, guardians, and students, ongoing achievement towards grade level state standards. This is an objective tool that is used to measure progress towards proficiency in the Massachusetts Curriculum Frameworks and will provide clear information for students, families and caregivers on what students are expected to know and be able to do by the end of each of three terms. Each of the four elementary schools in the district will provide opportunities for parents to learn more about the new report card.