

Grade Two LANGUAGE ARTS & LITERACY in the English Innovation Pathway

Students in grade two 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 learning appropriate strategies and skills to develop and strengthen comprehension across all content areas. Students will build their knowledge of 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.

Students will learn to:

- Develop phonics and sight word reading skills.
- Experience a variety of literature, including fantasy, folktales, fiction, nonfiction, biography and poetry.
- Retell the main idea, details, or ideas from books read aloud.
- Use comprehension strategies to gain a better understanding of the text (predicting, making connections, questioning, visualizing).
- Attend to the details, including illustrations and graphics in text to answer who, what, where, when, why, and how questions.
- Use text features (captions, bold print, and illustrations) to locate key facts and information.
- Develop ideas or opinions in writing using three or more supporting details.
- Use the steps of the writing process (brainstorm, draft, edit and revise) to craft stories that include a clear beginning, middle and end.
- Determine the meaning of a new word formed when a prefix is added to a familiar word.
- Use a variety of resources to locate information on a single topic and with support present information to the class either orally or in writing.
- Participate in class discussions using agreed upon rules and guidelines to gather and share information.

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. Students learn a variety of strategies to solve real life problems. Students also develop mathematical vocabulary while learning core concepts through hands on experiences and paper and pencil tasks.

Students will learn to:

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

Example: *There are 3 equal groups of frogs. Each group has 2 frogs. How many frogs will there be if all of the groups are joined together?*

Multiply 3 (groups of frogs) by 2 (frogs in each group),

$$3 \times 2 = 6$$

or

add all of the frogs in all of the groups together.

$$2 + 2 + 2 = 6$$

Number and Operations in Base Ten

- Understand place value.
- Use place value understanding and properties to add and subtract.

Examples: $65 - 18 = 65 + 18 =$

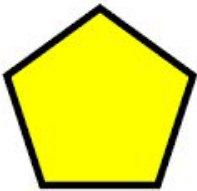
Measurement and Data

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

Example: *The polygon shown below is called a _____ because _____.*



Basic Math Facts & Computational Strategies

- Students will fluently add and subtract within 100 using place value strategies, using the relationship between addition and subtraction, and finding equivalent but easier sums.

HISTORY & SOCIAL SCIENCE in the English Innovation Pathway

Students in grade two will learn world and United States history, geography, economics and government by studying more about Americans and where they came from. They will explore their own families' histories and learn about distinctive achievements, customs events places and landmarks from long ago and from around the world.

Students will learn to:

- Describe how maps and globes depict geographical information in different ways.
- Locate and identify the seven continents, the major bodies of water, the five major rivers, and the major mountain ranges in the world.
- Explain the difference between a continent and a country and give examples.
- Locate the continent, regions, or countries from which their families came.
- With assistance give examples of traditions of customs from other countries that can be found in America today.
- Read and/or listen to a variety of true stories about individuals, recognized for their achievements, and describe and compare different ways people have reached these achievements.

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

Physical Science: Solids and Liquids

The **Solids and Liquids Unit** provides experiences that heighten primary students' awareness, curiosity, and understanding of the physical world and provides opportunities for young students to engage in scientific and engineering practices. Matter with which we interact exists in three fundamental states: solid, liquid, and gas. In this module, students will:

- Investigate and sort objects based on their properties.
- Observe, describe, and compare the properties and behaviors of solids and liquids. Record observations with pictures, numbers, and words.
- Recognize the properties of solid materials that make them appropriate for tower construction; build towers.
- Combine and separate solid materials of different particle sizes using tools.
- Observe, describe, and record what happens when solids and water are mixed and when liquids and water are mixed.
- Use knowledge to conduct an investigation on an unknown material (toothpaste).
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Life Science: Insects & Plants

The **Insects & Plants Unit** provides grade 2 students with life science core ideas dealing with structure and function of living things, growth and development of plants and animals, interactions of organisms with their environment, and biodiversity of organisms on land and in water. Students see the life cycles of insects unfold in real time and compare the stages exhibited by each species to reveal patterns. At the same time, students grow one type of plant from seed and observe it through its life cycle to produce new seeds. They gain experience with the ways that plants and insects interact in feeding relationships, seed dispersal, and pollination, and students develop models to communicate their understanding.

Earth and Space Science: Pebbles, Sand & Silt

The **Pebbles, Sand, and Silt Unit** provides experiences that heighten primary students' awareness, curiosity, and understanding of Earth's natural resources – rocks, soil, and water – and provides opportunities for students to engage in scientific and engineering practices. Students explore the natural world by using simple tools to observe and describe properties of earth materials. In this module, students will:

- Observe and compare physical properties of rocks and soils, using various tools.
- Rub rocks together and observe that they break into smaller pieces.
- Use screens to separate and group river rocks by particle size, and investigate properties of pebbles, gravel, sand, silt, and clay particles.
- Observe weather by using senses and simple tools.
- Explore places where earth materials are naturally found and ways that earth materials are used.
- Use sand to make sculptures and clay to make beads, jewelry, and bricks.
- Find, collect, record, and compare samples of soil outside the classroom.

DIGITAL LITERACY and COMPUTER SCIENCE in the English Innovation Pathway

Elementary scholars are introduced to foundational concepts by integrating basic digital literacy skills with simple ideas about computational thinking.

The strands covered Kindergarten through second 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 second grade will:

- Use a variety of digital tools to produce and publish writing, including in collaboration with peers.
- Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
- Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words 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.

Second graders are additionally utilizing: Keyboarding Without Tears, Various iPad apps including My Story, Tell About This, Write About This, Book Creator, Explain Everything, Chatterpix Kids, Popplet, and 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.