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*The mission of The Birches Academy is to cultivate a learning community that promotes excellence in core academics and the arts while valuing the individual qualities and strengths of each child.*

Grade 1 and 2 at a Glance

## ENGLISH LANGUAGE ARTS

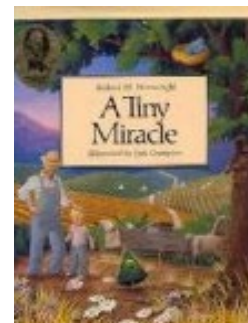
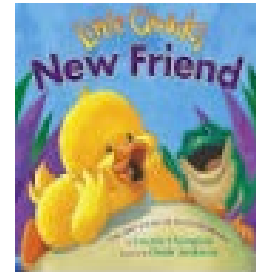
The language arts curriculum is aligned to the ELA Common Core (<http://www.corestandards.org/ELA-Literacy/>), which outlines grade-level expectations in the form of standards. The grade-specific standards are categorized as reading, writing, language & speaking and listening. Students engage in a variety of activities while building language arts skills through an arts integration approach to learning.

The teachers at Birches Academy utilize a variety of instructional resources and strategies to meet the needs of all learners. The instructional resources include the *Six Traits of Writing*, *Benchmark's Writers Workshop* and the *Fountas & Pinnell Leveled Literacy Intervention System*. The strategies include mini-lessons, small group instruction, independent reading, a guided reading program and the six traits writing process. Students enrolled at Birches Academy of Academics and Art can expect to progress through the grades while developing proficiency in all four areas of the Common Core.

### Overview of Expectations

#### Year A and Year B

- Understand basic sentence structure.
- Recognize syllables and differentiate between long and short vowel sounds.
- Decode one-syllable, two syllable and irregularly spelled words.
- Read with accuracy and fluency.
- Describe the characters and setting in a story.
- Learn to write using descriptive words and demonstrate creativity through the arts.
- Print upper and lower case letters.
- Understand basic rules of grammar.
- Determine when to use a comma, period or question mark.
- Engage in a teacher guided writing project.



# MATHEMATICS

The mathematics curriculum is aligned to the Mathematics Common Core (<http://www.corestandards.org/Math/>) with a focus on concept development, big ideas and essentials of understanding. The Mathematics Common Core is comprised of strands and specific grade-level standards that define what students should know and be able to do. The grade 1 and 2 strands include operations & algebraic thinking, numbers & operations in base ten, measurement & data, and geometry. The instructional resource in grades 1 through grade 6 is Pearson *EnVision Math*.

Teachers combine instruction with hands-on activities where students begin to develop a conceptual understanding of foundational mathematics, learn basic computational skills, engage in practice and apply knowledge to solve problems. The instructional approach allows for the daily reinforcement of basic skills as students gain a greater understanding of each strand and demonstrate proficiency in grade-level expectations. Based on assessment, student may engage in advanced mathematical studies consistent with the learning progression.

## Overview of Expectations

### Grade 1

- Solve problems using addition and subtraction.
- Count up to 20.
- Use place value.
- Be able to tell time.
- Use a ruler to measure length.
- Recognize geometric shapes.



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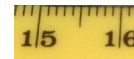


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### Grade 2

- Solve problems using multiplication.
- Use place value when adding and subtracting.
- Understand the units of measure.
- Learn about money and making change.



# SCIENCE

The science curriculum is aligned to the Next Generation of Science Standards (<http://www.nextgenscience.org/next-generation-science-standards>), a framework for K-12 Science education developed through a collaborative process. The framework is comprised of three disciplinary areas including physical science, life science, and Earth and space science where instruction is guided by grade-level performance expectations. A fourth area—engineering, technology and applications of science—identifies performance expectation by grade span.

The focus of study in grades 1 and 2 is the Earth, its structure and landforms, biomes and ecosystems. Students gain a perception of the world around them where knowledge and understanding become the underpinnings for socially responsible and caring young adults. Science instruction combines classroom discussion, hands-on activities, experiments and research. The science instructional resource, Pearson Interactive Science, provides for a blended learning experience and features write-in student modules along with an e-learning digital path.

## Overview of Expectations

### Year A

#### Physical Science

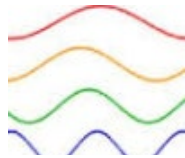
- Study about waves and how vibrations can make sounds.
- Explore lights and lighted objects.
- Investigate the use of sound and light for communications.

#### Life Science

- Identify the needs of plants and animals for survival.
- Explain why offspring do not look exactly like their parents.

#### Earth and Space Science

- Use observations of the sun, moon and stars.
- Understand that daylight hours depend on time of year.



### Year B

#### Physical Science

- Identify the characteristics of different materials.
- Assemble and disassemble objects.
- Understand that changes may or may not be reversible.

#### Life Science

- Understand that plants need sunlight and water to grow.
- Demonstrate how animals help in the pollination of a plant.
- Observe and compare different animals and the habitat.

#### Earth and Space Science

- Describe how wind or water can change the shape of the Earth's surface.
- Identify the different forms of water storage on Earth.

#### Engineering Design

- Identify and describe a solution to a problem.

# SOCIAL STUDIES

The social studies curriculum is aligned to the New Hampshire State Curriculum Framework for Social Studies ([http://www.education.nh.gov/instruction/curriculum/social\\_studies/documents/frameworks.pdf](http://www.education.nh.gov/instruction/curriculum/social_studies/documents/frameworks.pdf)). The Framework is divided into five content strands including civics, economics, geography, New Hampshire and United States history, world history and contemporary issues. Instruction combines classroom discussion, project-based learning, current topics in history and research.

## Overview of Expectations

### Year A

#### Civics and Government

- Compare the rules of the classroom to those of the US government.

#### Economics

- Define goods, services, producers and consumers.
- Identify the steps and materials needed to make a product.
- Define resources and survival needs of the early settlers.

#### Geography

- Learn to use maps and globes.
- Describe the seasons in New Hampshire.
- Identify the seven continents, major oceans and various biomes on Earth.
- Understand the characteristics of an ecosystem, and identify different ecosystems.

#### US and NH History

- Explore the various national and New Hampshire celebrations, monuments and symbols.
- Discuss how the lives of women and children have changed over time.



### Year B

#### Civics and Government

- Examine the roles and responsibilities of family, school and community members.

#### Economics

- Identify the characteristics of money.
- Understand the need and benefit of banks and banking.

#### Geography

- Understand that the world is made up of different countries.
- Investigate, and identify, rural, urban and suburban populations.
- Describe essential resources—food, water and shelter.

#### US and NH History

- Understand that the economy is driven by farming, manufacturing and retail.
- Explain how different peoples have influenced US life.

#### World History

- Discuss the social and political systems of various countries in the world.
- Describe the song and dance of different cultures.



# ART

The art program provides students with an introduction to the arts and art forms. Students explore color, textures, and mediums while developing an appreciation for the arts. Teachers work collaboratively with the art teacher to give students every opportunity to express thoughts and ideas through the arts.

## Overview of Expectations

### Colors and the Color Wheel

- Explore the primary colors—red, blue, green and yellow.
- Mix colors to make orange, purple, green and other colors.
- Work with patterns, tone and repetitions of color.



### Drawing

- Engage in observational drawing with patterns using leaves.
- Explore the use of watercolor to enhance images.
- Experiment with line and blown ink to create texture and patterns.
- Understand the effects of light on an object, and create highlights and shadows.



### Painting

- Explore shapes and arrangements and their effects on a painting.
- Explore the use of pastels in painting.



### Printmaking

- Demonstrate stamping, monoprints, rubbings, stencils and incised prints.
- Explore African wrapping paper using the colors and symbols of the African Culture.

### Paper Mache

- Learn the techniques of Paper Mache.

### Collage

- Explore the basic techniques of collage including moving shapes and composition.
- Create snowmen using cardboard, shaving cream and glue-based on "Snowballs" by Lois Elhert.
- Create collage quilts using simple quilt design.

### Construction Studio

- Build a structure using a variety of materials and techniques.



## MUSIC

The music program is designed to instill a love of music and an introduction to the art of music. Students explore music through listening, moving to rhythms and singing a variety of songs. Beginning music theory introduces students to basic melody and music notations. Students attend general music twice per week and engage in a variety of performances. Teachers collaborate, ensuring that students have every opportunity to express thoughts and ideas through music and the arts.

### Overview of Expectations

- Develop a singing voice with a varied repertoire of music, singing alone and with others.
- Explore the vocabulary of music and understand basic concepts.
- Learn to read music and write using standard notation to create basic melodic and rhythmic routines.
- Explore and learn to play percussion instruments—rain sticks, maraca, wood blocks and Orff instruments.
- Listen to the music of an orchestra, and identify the instruments that create the various sounds.
- Learn about kinesthetic and movement to music.



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## PHYSICAL EDUCATION

Students participate in age appropriate, safe and effective physical activities based on the New Hampshire K-12 Physical Education Curriculum Guidelines. The program encourages students to perform a variety of physical activities that focus on building motor skills and the qualities of movement. A pre and post "Pacer" assessment is conducted to determine cardiovascular endurance. This assessment demonstrates student growth and indicates what students need to improve on and/or maintain for physical health and well-being.

The content has been curated from the Common Core ELA and Math, Next Generation Science Standards (NGSS), and the K-12 NH Social Studies Curriculum Framework (July 2014).