

Overview

Second graders exhibit a growing confidence and competence with their academic and social skills. During this year, the students take part in more challenging and creative experiences while working independently and cooperatively with their classmates. The second-grade curriculum emphasizes reading, oral and written language development, and mathematics. The students spend the year developing their organizational skills, responsibility, work habits, and independence. At this age, they begin to manage weekly homework packets focused on reading, spelling, and math review. Second graders also read for twenty minutes nightly.

The social curriculum is as important as the academic curriculum in second grade. Students begin each day with Morning Meeting where they greet one another and discuss the daily routines, schedule, calendar, and count the days of school in various ways. This practice helps build a community of sharing and caring about one another. Through principles of *Responsive Classroom* and *Open Circle*, the children practice social skills. Weekly class meetings, written reflections, read-aloud stories, and role-playing encourage students' cooperation, accountability, empathy, and self-control. Creating a cooperative classroom environment, building positive relationships, and solving social problems are essential parts of the daily routine.

Second grade students enjoy a variety of resources and enrichment opportunities. They have access to iPads and often use creative apps to learn or present information. Some commonly used apps are Epic!, SeeSaw, Book Creator, Pixie, Tellegami, and Magazine which is linked to the *Scholastic News* magazines. Second graders also visit the Adams Lab to use Mac desktop computers to access *enVisionMATH* online resources and a variety of other websites and programs and a variety of other activities.

While technology is an excellent tool to use in the classroom, off-campus field trips also bring valuable learning experiences to the students. Second graders visit Plimoth Plantation and the Mayflower II in conjunction with their social studies unit on Native American tribes. They also take an annual trip to the Wheelock Family Theater to watch a performance. Second graders perform community service and develop social awareness in a number of ways. They visit the local Council on Aging and interact with seniors. They also take part in an annual baking project to support the Dedham Food Pantry. On DCD's annual Dr. Martin Luther King Jr. Service Day second graders participate in a walk-a-thon to raise money for local charities.

Language Arts

Reading

Second graders work comfortably and confidently toward building a solid foundation of basic reading skills. The class is flexibly divided into small groups according to specific needs. Within these groups, each teacher employs methods, techniques, and materials deemed most effective for her group. The *Guided Reading* method offers students practice with critical thinking and comprehension skills such as generating and asking questions, identifying the main ideas and details, and story mapping. Students develop fluency through oral reading practice. The *Project Read* curriculum provides a multi-sensory, systematic, and sequential framework for teaching phonics. Teachers offer literature-based reading lessons from a broad selection of trade books including fiction, nonfiction, and poetry.

A highlight is the author study of Beatrix Potter. Children learn about Miss Potter's life, read *The Tale of Peter Rabbit* and several of her other titles. Second graders study all the elements of the story and compare that book with their choice of another of the author's books.

Writing

In second grade, students continue to develop their abilities with written expression. They learn the basic rules of punctuation, capitalization, and grammar. They review the lower- and uppercase letters using *Handwriting without Tears*. Second graders participate in Writing Workshop. During Writing Workshop, they develop small-moment stories, friendly letters, and poems. They utilize graphic organizers to organize their thoughts prior to drafting. Each student works at his or her own pace. They learn the steps to the writing process and spend the year developing their writing skills and learning how to self-edit. Students meet with teachers on an individual basis to discuss their work, and they also share their work with each other regularly.

Spelling

The spelling program in second grade focuses on identifying spelling rules, generalizations, and patterns so that students learn them and may rely on them in their own writing. Memorizing spellings is reserved for phonetically irregular words that do not follow a pattern. The curriculum provides a structured and consistent approach, and each lesson builds upon previous lessons. Spelling lists are derived from *How to Spell*, Project Read, and Rebecca Sitton's *Spelling Sourcebook*.

Language arts classes meet for 30 minutes daily. In addition, Writing Workshop meets for 45 minutes three times in a six-day cycle.

Math

Second grade uses the *enVisionMATH* program. The program provides structured instruction to guide students in developing mathematical reasoning skills. Some additional skills second graders focus on throughout the school year are extending and understanding of base-ten notation, building fluency with addition and subtraction facts, comparing numbers, using standard units of measurement, telling time, and describing and analyzing shapes. One- and two-step word problems help students gain a better understanding of the structure and meaning of an operation and help them to apply different skills and strategies to solve real-world problems. The program is divided into sixteen topics that are broken down into smaller daily lessons, with an assessment at the end of each topic.

Numbers and Operations

Students extend their understanding of the base-ten system as they explore place value in multi-digit numbers up to 1000. They identify odd and even numbers, count by multiples of 2s, 5s, 10s, and 100s, and they also examine and compare the relationships among these units. As they strive for mastery of facts to 100, second graders explore a variety of addition and subtraction strategies. They learn to use doubles, near-doubles facts, and adding 10 as strategies to improve their mental math calculations.

Geometry

Second graders describe and analyze shapes by examining the sides and angles of two-dimensional shapes and the surfaces, vertices, and edges of three-dimensional shapes. Through building and drawing two- and three-dimensional shapes, students develop a foundation for understanding polygons, solids, area, volume, congruence, similarity, and symmetry in later grades.

Measurement

Students explore standard units of measure (inches, feet, yards, centimeters, meters) and use rulers, yardsticks, meter sticks, and other measurement tools to compare lengths of several objects. Students also use analog and digital clocks to tell time to five minutes including before and after the hour. They also learn to distinguish between a.m. and p.m. Second graders count money using coins and bills and show different ways to make the same amount.

Data Analysis and Probability

Second graders organize, represent, and interpret data using picture graphs, bar graphs, and line plots. The students analyze the data and solve problems using the information they have gathered.

Patterns and Algebraic Thinking

Throughout the year, second graders explore patterns using numbers and shapes. They identify relationships between two patterns and use this information to solve problems.

Math classes meet daily for 45 minutes.

Social Studies

Second graders focus on Native American cultures of North America and the geography of the United States. The goals of the social studies curriculum are for students to learn about the life and times of the Pilgrims and Wampanoag as well as other Native American cultures and to become familiar with the fifty US states. During the course of the year, second graders develop skills such as reading for information, questioning, making connections, and gaining an awareness of and an appreciation for other cultures. The teachers offer an integrated approach that includes reading, writing, art, and music activities. During the Thanksgiving Assembly, second graders present a recitation of the historical events leading up to the first Thanksgiving. To prepare for this event, they study the Pilgrims' journey to the New World. Reading several books, completing a variety of activities, and traveling back in time to 1620 on a field trip to Plimoth Plantation and the Mayflower II present the students with rich knowledge to include in their presentation. The students continue to study Native Americans of the past in the Plains, Northwest, Southwest, and Southeast regions of the United States while also learning current fun facts about each state within the region.

Social studies classes meet for 45 minutes three times in a six-day cycle.

Science

Science in second grade focuses on problem-solving using the scientific method as well as the engineering design process. During the fall and winter terms, students conduct a series of experiments investigating the properties of light and water. For the first time in their science classes, students will write lab reports to document their observations and thoughts and to demonstrate their comprehension. In the lab reports, the students strive to compose complete thoughts using descriptive language and to create detailed and well-labeled drawings of the experiments. During the spring term, students use the engineering design process. Whether the goal is to create a catapult or a bridge, engineers rely on the design process to guide them. Students focus on creative thinking to solve problems and learn that the process has to be adapted to each individual situation.

Science classes meet for 40 minutes once every six days.

Library

The second-grade library curriculum focuses on folktales from around the world, including Native American folktales, both traditional and contemporary versions. In accordance with lower school tradition, second graders conduct an author study, usually of the works of Hans Christian

Andersen and Patricia Polacco. The librarian guides students in choosing books that are appropriate to their interest and reading level while instructing them in how to locate fiction and non-fiction books in the library. They become more independent in using the online card catalog. During part of the year, second graders enjoy an introductory unit on the basics of computer science through coding.

Library classes meet for 45 minutes once every six days.

Music

The second-grade music curriculum is built upon the basic skills taught during the previous year. Students are introduced to complex rhythms and notation where practice and repetition are the keys to learning to play an instrument. Themes center on secular music and complex rhythms. Singing and movement activities, critical to a child's musical development, occur in every class. Singing and learning to read musical notation and playing the recorder all help to provide students with a strong foundation to build upon in the later grades. Performing in front of an audience is another major part of the vocal music program. Second-grade students participate in the Thanksgiving and Holiday Assemblies, the Lower School Visual and Performing Arts Assembly, and their class play.

Music classes meet for 45 minutes twice every six days.

Visual Art

Second graders continue to develop their foundation of skills and vocabulary to create and discuss works of art. The lessons garnered in the creative process are more important than the final product. Young artists have the opportunity to think critically, take risks, and be self-reliant when solving problems. Students are nurtured and supported through periodic group discussions, through prominent display of their work, and through community-wide assemblies. Instruction in the elements of design, including point, line, form, movement, space, color, pattern, and texture, continues. Using American story quilts as inspiration, students develop a theme and visually tell a story in a large crayon and watercolor painting. Students explore the tactile world of clay and produce covered jars. Texture and balance are a focus of this project.

Visual art class includes art history as well. Lower School students at each grade level study the life and work of a particular artist and create a piece in the artist's style. Second graders examine Georges Seurat's *A Sunday Afternoon on the Island of La Grande Jatte* and *The Circus*, and then they create an original work using Seurat's pointillist technique. Second graders come to a deeper understanding of the structure and routines of a working studio. The studio is a tool itself, and students learn to purposefully utilize and care for the space and materials.

Visual Art classes meet for 45 minutes once every six days.

Woodworking

Over the course of their second-grade year, students continue to explore and develop how to utilize basic tools, thereby reinforcing their understanding of foundational woodworking concepts. Throughout the year, the teacher leads the students through a series of projects in an effort to solidify instructional points. Basic design, scale, and process are discussed and integrated into student projects. The teacher introduces measurement during this year with weekly exercises aimed at becoming comfortable with identifying the parts of the inch. During the construction of each project, students collaborate with classmates within a climate of mutual respect and support. Bubble letter design is a favorite second-grade project. Throughout the year an atmosphere that fosters collaboration and a desire to learn more frames each woodworking class.

Woodworking classes meet for 45 minutes once every six days.

Drama

Second graders perform together in a theatrical play. Unlike the plays of younger students, their play will have different character groups who act in different situations. The second-grade play is more complex and allows the students to tell a more detailed story on stage. Second graders learn how to enter and exit the stage and understand the need to stay in character even during a scene change and blackout. Students receive approximately eight lines each to memorize.

During rehearsals, the second-grade students are asked to consider the following questions: “How do I become an actor?”; “How can I use my face and voice while acting?”; “How can I use my hands and body language to create a character?”; and “How can props on stage to help enhance the play?”

The goal of the second-grade play is for all students to learn how to replicate what they have practiced in rehearsals when performing for an audience. By second grade the goal is for the students to understand how their individual play character can develop the plot of the play. Rehearsals and performances also focus on how voice projection and expression can entertain and inform the audience.

Drama classes meet for approximately 15 rehearsals prior to performing the class play.

Physical Education

In second grade, PE class, students participate in a variety of exercises, team sports, and cooperative games. The PE teachers present games and activities in a number of formats, allowing students to work individually, with partners, in small groups, or as a whole class. Building on the foundation of physical skills developed in earlier grades, students are introduced to rules and strategies for soccer, touch football, field hockey, handball, basketball, floor hockey, volleyball, pickle ball, baseball, and lacrosse. Students work on improving the following manipulative skills: throwing, catching, collecting, kicking, striking, punting, dribbling, and volleying. Gymnastic and rhythmic activities include balancing, tumbling, vaulting, creative movement, and swinging on ropes. The students also participate in the *FitnessGram*, which teaches correct form for a variety of stretches and exercises. Teachers actively promote sportsmanship, teamwork, self-control, and fair play. The program encourages students' healthy physical growth and the development of positive attitudes toward health and fitness.

PE classes meet for 45 minutes four times in the six-day cycle.