

OVERVIEW

Second graders are refining the skills they have learned in first grade. They exhibit a growing confidence and competence in their academic and social skills. This year, students participate 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, mathematics, the Indigenous Peoples of North America, and the geography of the United States. 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 nightly.

The social curriculum is as important as the academic curriculum in second grade. Students make the transition from home to school and begin each day with Morning Meeting, where they greet one another, discuss the daily routines, schedule, and calendar, and engage in activities to set a positive tone for the day. This practice helps build a community of sharing and caring about one another. Through the principles of *Responsive Classroom*, the children practice social skills. Daily class meetings, written reflections, and read-aloud stories encourage students' cooperation, accountability, empathy, and self-control. Creating a cooperative classroom environment, building positive relationships, and solving social problems are essential to the daily routine.

Second-grade students enjoy a variety of resources and enrichment opportunities. They have access to iPads and often use various apps to learn, present information, and create digital portfolios. Some commonly used apps are Epic!, Lexia, See Saw, Book Creator, and Scholastic News Magazine.

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 the Massachusetts Horticultural Society at Elm Bank to learn about and create paintings of botanical flowers. They also take an annual trip to the Wheelock Family Theatre to watch a performance. Second graders perform community service and develop social awareness in a number of ways. They participate in DCD's annual Dr. Martin Luther King Jr. Service Day through a walk-a-thon to raise money for local charities, including the Make-a-Wish foundations of Massachusetts and Rhode Island.

LANGUAGE ARTS

Reading

Second graders work toward building a solid foundation of basic reading skills. The class is divided into small, flexible groups according to specific needs. Within these groups, each teacher employs methods, techniques, and materials deemed most effective for the group. Reading groups offer students practice with critical thinking and comprehension skills such as generating and asking questions, identifying the main ideas and details, and using graphic organizers. 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 and novels including fiction, nonfiction, and poetry.

A highlight is the author study of Beatrix Potter. Children learn about Ms. 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 the book with other works of Beatrix Potter.

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 lower- and uppercase letters and are introduced to lower-case cursive using *Handwriting without Tears*. Second graders participate in Writers' Workshop. During Writers' Workshop, they develop small-moment stories, friendly letters, non-fiction stories, and poems. 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 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 45 minutes daily. In addition, Writers' Workshop meets for 40-45 minutes each day.

MATH

Second grade uses the *Investigations Into Number, Data and Space Program 3*. 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 Investigations program is divided into eight broad units, inviting inquiry, immersion, extension and conversation. The units are:

- 1: Coins, number relationships and contextual applications
- 2: Attributes and introduction to fractions
- 3: Place value to 100 using numbers and money
- 4: Sorting, classifying, graphing and functions
- 5: Place value to 1,000 using benchmarks and strategies to increase fluency
- 6: Linear measurement
- 7: Foundations of multiplication
- 8: Models of addition and subtraction of larger numbers

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 for 45-50 minutes each day.

SOCIAL STUDIES

Second graders focus on the indigenous 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, past and present— of the different cultures of the Indigenous Peoples, 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. Students participate in the Thanksgiving Assembly by sharing reflections on the themes of giving thanks. To prepare for this event, students read several books, and complete a variety of activities. In the second part of the year, students study United States geography and complete research projects about an individual state.

Social studies classes meet for 45 minutes, three times a week.

SCIENCE

Science in second grade focuses on problem-solving using the scientific method as well as the engineering design process. 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, 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. Second-grade classes also learn about gardening throughout the year while tending the many planters on campus.

Science classes meet for 45 minutes twice a week.

LIBRARY

Second-grade library curriculum focuses on expanding students' independent reading and researching skills. They become nonfiction experts in a study exploring how and why libraries are organized using the Dewey Decimal System. We continue supporting their love of reading with the Irma Black Award, where we explore and read picture books as part of this annual literary award selected by students. Second graders will also do a mini-research project on famous landmarks in the United States, following which they will write their own tall tales.

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 singing and learning to play an instrument. Themes center on secular music, note reading, rhythms reading, solfège, composition, using manipulatives to express rhythm and note structure, and improvisation. 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, Orff xylophones, Boomwhackers, and percussion 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 and instrumental music program. Second grade students participate in the Thanksgiving and Winter Assemblies, the Lower School Visual and Performing Arts Assembly, and their class play.

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 pointillism 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.

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, each woodworking class is framed by an atmosphere that fosters collaboration and a desire to learn more.

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 facial and vocal expression while acting?”; “How can I use my hands and body language to create a character?”; and “How can props on stage help to 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, and for 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 Physical Education class, students participate in a variety of team sports, cooperative games, movement activities, dance, and gymnastics. Games and activities are presented in a number of formats allowing students to work individually, with partners, in small groups, or as a whole class. The PE teachers design lessons to help students develop and improve locomotor skills, manipulative skills, body control, physical and spatial awareness, balance, flexibility, and fitness. Locomotor skills can include walking, running, hopping, skipping, galloping, chasing, fleeing, and dodging. Manipulative skills can include throwing, catching, kicking, collecting, striking, punting, dribbling, and volleying. Gymnastic and rhythmic activities can include balancing, tumbling, vaulting, creative movement, and swinging on ropes. Fitness activities can include jumping, running, push-ups, sit-ups, and stretching. Teachers actively encourage sportsmanship, teamwork, cooperation, and fair play. The program encourages students' healthy physical growth and the development of positive attitudes toward health and fitness. Physical Education classes meet three times a week.

SOCIAL EMOTIONAL LEARNING

Grade two students participate in teacher-led discussions and activities designed to support Social Emotional development in the classroom. Through a combination of movement, breathing, storytelling, partner activities and group discussions, students practice essential skills that include but are not limited to:

- *Concentration, focus, and attention* - breath exercises, movement exercises and age-appropriate mindfulness techniques
- *Self advocacy and self regulation* - considering bringing our best selves to our community and recognizing our individual and collective needs
- *Recognizing strong emotions* - developing calming strategies
- *Increased confidence and self-esteem* - successfully trying new things in a fun, nurturing and joyful environment

STEAM

The primary focus of the second-grade STEAM (Science, Technology, Engineering, Arts, and Mathematics) curriculum is hands-on problem-solving and discovery through play. Students use the design thinking process (i.e., think, plan, do, review) through their explorations. They have opportunities to work through an idea and adjust the plan through collaboration with peers and teacher-guided questions. Students explore, make, create, and build with a variety of materials and tools. Second grade students continue developing skills to understand technology as a learning tool. They acquire digital literacy skills through exploration with DCD's technology tools,

including iPads and robots. Students develop computational thinking skills with an emphasis on loops, debugging, and game creation.