



Needham Public Schools

GRADE 2 CURRICULUM SUMMARY

September 2023

Mathematics

The big ideas in grade 2 include: extending understanding of the base-ten number system, building fluency with addition and subtraction, using standard units of measure, and describing and analyzing shapes. The content is organized into the following units:

- Adding, Subtracting, and Working with Data
- Adding and Subtracting within 100
- Measuring Length
- Addition and Subtraction on the Number Line
- Numbers to 1,000
- Geometry, Time, and Money
- Adding and Subtracting within 1,000
- Equal Groups

Throughout these units second grade students will engage in mathematical practices—making sense of problems, reasoning abstractly and quantitatively, making arguments and critiquing the reasoning of others, modeling with mathematics, making appropriate use of tools, attending to precision in their use of language, looking for and making use of structure, and expressing regularity in repeated reasoning.

Reading

- Participate in book discussion with partners, small groups, and whole class
- Select books for independent reading appropriate to level and interest
- Know the difference between fiction and non-fiction
- Read for pleasure and begin to read for information
- Read and recognize characteristics of various genre
- Select appropriate print strategies
- Recognize story elements (character, setting, plot)
- Retell and discuss stories
- Read to acquire information
- Use comprehension to deepen understanding
- Increase knowledge of word structure and vocabulary

Writing

- Use stages of the writing process including, drafting, revising, editing and publishing
- Begin to experiment with graphic organizers to plan writing
- Use oral story telling to plan writing
- Use pictures and sentences to tell a story across multiple pages
- Use mentor text to learn crafting techniques
- Write with voice
- Use phonetic spelling
- Spell grade level high frequency words correctly
- Use the word wall and other spelling resources
- Use beginning capitalization and ending punctuation
- Experiment with punctuating dialogue
- Write in different genres and for different purposes

Science

We have completed aligning Needham's elementary & science curriculum with the MA science & technology/ engineering framework. New units incorporate aspects of Culturally Responsive Teaching (CRT.)

Grade 2 content topics are:

- Trees (Life Science)
- Properties and Magnets (Physical Science)
- Water Habitats* (Earth/Life Science) *revised for 2023-24

Social Studies

Students learn about geography and engage in inquiry-based social studies as they study the following unit:

- Five Themes of Geography (location, place, relationships, movement, regions)

Spanish Language & Culture

Novice Range Skill Development

Using practiced or memorized words and phrases, and with the help of gestures or visuals, students will be able to:

- Introduce oneself
- Understand memorized or familiar words, phrases and questions in conversations
- Provide information by answering a few simple questions on very familiar topics
- Ask high frequency questions
- Name very familiar people, places and objects
- Express basic preferences (likes and dislikes)
- Express feelings
- Interact at a survival level in some familiar everyday contexts
- Demonstrate awareness, curiosity and appreciation for different cultures

Topics and Themes:

- My school community and school day routines
- Kindness in the classroom: How can I be a kind friend and classmate?
- The seasons and what I wear to school
- Off to School! How I get to school
- All Around my school: Locations and directions
- Meal-time at School: Snack & Lunch foods
- Activities and sports
- Taking care of our environment

Art

- Uses problem solving to create and refine works of art.
- Use artistic tools appropriately to create works of art that express specific concepts such as texture
- Uses a sequential process in creating works of art and is able to communicate this process to others.
- Make connections between an artwork and their personal experience.
- Generate ideas using a variety of platforms.
- Demonstrate an understanding of the Elements and Principles of Art and Design. Be able to apply these principles in artistic work in a developmentally appropriate way.
- Draw from memory, observation, and imagination
- Explore different types of texture
- Continue to explore painting techniques

Music

- Explore different musical ideas by experimenting with the voice or instruments.
- Identify pitches do, re, mi, sol, la
- Perform, read and write rhythm patterns using voices, instruments and body percussion
- Demonstrate different musical forms
- Demonstrate different tempi through movement
- Experience the music of diverse cultures
- Demonstrate the ability to use a healthy singing voice

Physical Education

- Experience the joy of movement with self and others
- Learn movement concepts and skills that will lead to enjoyable participation in activities/games/sports
- Work independently with others in partner environments with minimal teacher prompting
- Jump a long rope continuously turned by others
- Kick a rolling ball to a large, stationary target with the instep
- Dribble a ball continuously using alternating hands
- Apply simple strategies in chasing and fleeing activities
- Demonstrate the ability to move to a beat with various body movements and direction changes

Media & Digital Learning

- Read and present information for author/illustrator studies
- Identify different literature types
- Use a simple table of contents and index
- Identify Caldecott titles and series of books
- Differentiate between fiction and nonfiction
- Understand that biographies are true stories of a person's life
- Recognize the patron catalog as a locational tool
- Use advanced digital drawing tools
- Program computer using block programming
- Digitally locate, retrieve, and save files
- Combine pictures and text using digital tools for projects
- Understand the concept of Digital Citizenship
- Understand roles that children play in cyberbullying situations, including bystanders and upstanders
- Deepen use of cloud-based learning systems to access and complete assignments and collaborate online

Social & Emotional Learning

Social and emotional learning (SEL) is the process through which children acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. SEL is more than just a program or lesson. It is about how teaching and learning happens, as well as what you teach and where you learn. There are a variety of approaches used to teach SEL including:

- Free-standing lessons designed to enhance students' social and emotional competence explicitly.
- Teaching practices such as cooperative learning and project-based learning, which promote SEL.
- Integration of SEL and academic curriculum such as language arts, math, social studies, or health.
- Organizational strategies that promote SEL as a schoolwide initiative that creates a climate and culture conducive to learning.

At the elementary level, the Responsive Classroom Approach is used to promote well-designed practices intended to create safe, joyful, and engaging classroom and school communities. The emphasis is on helping students develop their academic, social, and emotional skills in a learning environment that is developmentally responsive to their strengths and needs.

Students develop their SEL skills across five competencies:

- Self Awareness
- Self Management
- Social Awareness
- Relationship Skills
- Responsible Decision Making

Grade 2 Racial Literacy

Diversity Around the World: How Our Geography and Our Daily Lives Connect Us

Students investigate aspects of our daily lives and routines- housing, clothing, hobbies, traditions, family, food, etc.-- to make connections between our physical and cultural spaces. Second graders study people and cultures around the world to develop global citizenship.