



Needham Public Schools

GRADE 3 CURRICULUM SUMMARY

September 2023

Mathematics

The big ideas in grade 3 include: developing understanding of multiplication and division and strategies for multiplication and division within 100; developing understanding of fractions, especially unit fractions (fractions with numerator 1); developing understanding of the structure of rectangular arrays and of area; and describing and analyzing two-dimensional shapes. The content is organized into the following units:

- Introducing Multiplication
- Area and Multiplication
- Wrapping Up Addition and Subtraction within 1,000
- Relating Multiplication to Division
- Fractions as Numbers
- Measuring Length, Time, Liquid Volume, and Weight
- Two-dimensional Shapes and Perimeter

Throughout these units third 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
- Read independently for longer periods of time
- Read and discuss a variety of genres
- Identify synonyms, antonyms and multi-meaning words
- Use context clues to define multi-meaning words and new vocabulary
- Increase knowledge of word structure and vocabulary
- Use comprehension strategies to deepen understanding
- Recognize story elements (characters, setting, plot) in fiction
- Distinguish between summary and retelling
- Begin to support answers with evidence from text
- Read to acquire information

Writing

- Use stages of the writing process including drafting, revising, editing, and publishing
- Use graphic organizers to plan writing
- Use a variety of genres for different writing purposes
- Begin to consider audience and purpose for writing
- Use mentor text to learn crafting techniques
- Write with voice
- Begin to develop research skills to support non-fiction writing
- Write in response to a prompt
- Spell grade level high frequency words
- Use conventions of punctuation
- Begin to use paragraphs
- Vary sentence structure

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 3 content topics are:

- Survivor: Isopods, Adaptations and Fossils (Life Science)
- Energy & Electricity (Physical Science)
- Changes in Earth's Surface* (Earth Science) *revised for 2023-24

Social Studies

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

- Needham/Boston, 1711 to present
- Regions of the U. S.
- Continents
- Map Skills

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:

- 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:

- Cultural Focus: Life in Mexico
- "A School Day" in the USA and in Mexico
- Let's Eat! Expressing likes, dislikes and curiosities about food
- Where I Live
- Places Around Town
- A Healthy Life (body, nutrition)

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 simple perspective
- Uses a sequential process in creating works of art and is able to communicate this process to others.
- 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.
- Connect with art in other settings
- Explore proportion and perspective
- Mix and arrange different groups of colors

Music

- Individually read moderately complicated rhythms and melodies in standard notation in treble clef.
- Accurately performs one and two part recorder music with appropriate recorder technique.
- Recognize and perform basic melodic and rhythmic patterns
- Listen to and learn about selected major composers and compositions
- Sing music from diverse cultures
- Listen and recognize duple and triple meter
- Recognize the relationship between beat and rhythm
- Recognize and use dynamic changes for expressive purposes
- Beginning Strings may be elected in grade 3. Demonstrates continuous growth in performance skill on chosen instrument.

Physical Education

- Experience the joy of movement with self and others
- Practice and apply movement concepts and skills that will lead to enjoyable participation in activities/games/sports
- Exhibit personal responsibility while working cooperatively with others
- Demonstrate the ability to combine balance and weight transfers with movement concepts
- Use proper form while throwing overhand to a stationary target
- Demonstrate the ability to catch a ball thrown from a partner while standing in a stationary position
- Use proper underhand form to strike an object over a net
- Use proper grip and form to strike a stationary ball consistently using a long-handled implement

Media & Digital Learning

- Locate information using tables of contents and indexes
- Understand the Dewey Decimal System and be able to locate books
- Author documents and use text editing tools
- Insert graphics from the web into a digital document
- Consider the purpose and audience for a presentation
- Use multimedia tools to present new understandings
- Login and online collaborative tools
- Program computer using a variety of coding tools
- Continue to learn about the emotional impact of cyberbullying
- Understand basics of Digital Citizenship
- Use cloud-based systems to access and complete assignments, save and organize documents, access work, 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 3 Racial Literacy

Stories of Activism: How One Voice Can Change a Community

Students investigate themes of fairness, courage, friendship, and empowerment by reading the stories of “everyday” heroes and famous figures who responded to discrimination and racism. When learning about inequality, students will also explore the counter concept of building and bridging diverse communities.