



Needham Public Schools

GRADE 5 CURRICULUM SUMMARY

September 2023

Mathematics

The big ideas in grade 5 include: developing fluency with addition and subtraction of fractions, developing understanding of multiplication and division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions), extending division to two-digit divisors, developing understanding of operations with decimals to hundredths, developing fluency with whole number and decimal operations, and developing understanding of volume. The content is organized into the following units:

- Finding Volume
- Fractions as Quotients and Fraction Multiplication
- Multiplying and Dividing Fractions
- Wrapping Up Multiplication and Division with Multi-digit Numbers
- Place Value Patterns and Decimal Operations
- More Decimal and Fraction Operations
- Shapes on the Coordinate Plane

Throughout these units fifth 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 text with fluency and expression
- Use multiple strategies to determine word meaning
- Understand the connotations of words and figurative language
- Read for insight, pleasure, information
- Gather, take notes, organize and synthesize relevant information
- Use comprehension strategies to deepen understanding
- Read to acquire information
- Apply comprehension strategies to content area
- Increase knowledge of word structure and vocabulary

Writing

- Use the writing process including drafting, revising, editing, and publishing
- Use graphic organizers to plan writing
- Select appropriate genres for different writing purposes
- Consider audience and purpose for writing
- Use conventional spelling
- Use mentor text to learn crafting techniques
- Write with voice
- Use research skills to support informational writing

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 5 content topics are:

- Ecosystem Restoration (Life & Earth Science)
- Changes in Matter (Physical Science) *revised for 2023-24
- Weather & Water (Earth Science)

Social Studies

We will be using the Investigating History curriculum across all grade 5 classrooms this school year. This curriculum includes 4 units of instruction:

- Early colonization
- Revolution and principles of American government
- Growth of the republic
- Slavery, the Civil War, and struggle for civil rights for all

Spanish Language & Culture

Novice Range Skill Development

Using a mixture of practiced words, phrases, simple sentences/questions, students can:

- Understand the general topic in conversations and simple texts
- Identify memorized or familiar words, phrases and questions in conversations and simple texts
- Ask high frequency questions
- Present information about myself, my interests and my activities
- Provide information by answering a few simple questions on very familiar topics
- Interact at a survival level in some familiar everyday contexts
- Identify products and practices in their own and another's culture to help understand diverse perspectives

Topics and Themes:

- Cultural Focus: Life in Argentina
- Description of myself and others
- Food and cultural customs
- Activities and pastimes
- Seasons and weather
- Clothing
- Planning for vacation and travel

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 composition.
- 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.
- Explain artistic choices by developing an artist statement.
- Connect with art in other settings
- Use shading to create three-dimensional forms
- Demonstrate working with painting techniques
- Create a 3-D form for self-expression

Music

- Identify standard notation symbols and musical terms referring to dynamics, tempo, articulations, meter, and expression and apply them when performing
- Uses elements of music to compose a composition under specified guidelines.
- Demonstrate more refined vocal production and uses singing voice appropriately.
- Sing and play music using dynamics and tempi as expressive tools
- Listen to and analyze music for expressive purpose and form
- Evaluate personal music performance in oral and written form
- String Ensemble or Band may be elected in grade 5. 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
- Accept, recognize, and actively involve others with both higher and lower skill abilities into physical activities and group projects
- Throw overhand using a mature pattern to a moving target in a small-sided game
- Forearm pass a ball to a partner/teammate in a modified game activity with correct form
- Apply basic offensive and defensive strategies and tactics in small sided games
- Combine a minimum of 5 gymnastics skills (rolling, balances and weight transfers) to create and demonstrate a gymnastics sequence

Media & Digital Learning

- Identify point of view and genres in literature
- Read a variety of literature genres, particularly historical fiction
- Cite sources from print and electronic
- Use specified search engines and directories and access sources
- Use a variety of reference tools
- Refine creation of work, especially in cloud-based system, including multimedia projects
- Define and identify specific cyberbullying challenges that occur in school or online
- Program computer and robots using a variety of coding tools
- Further refine understanding of Digital Citizenship
- Further understanding in using 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 5 Racial Literacy

How Immigration and Forced Movement Shaped the Racial and Cultural Landscape of the United States

Fifth graders trace the history of immigration and enslavement in the United States to build an understanding of national demographics and different racial perspectives. Students review cultural contributions, persecution, and resistance from varied ethnic groups.