

Science

The science curriculum in fifth grade focuses on practicing scientific & engineering skills within science content. In 2021-22 students will investigate three topics: life science (Ecosystems), earth & physical science (Weather & Water) and physical science (Change in Matter). In "Ecosystem Restorations", students are introduced to a fictional problem in a Costa Rican rainforest. Through this problem, students learn about photosynthesis, explore matter and energy moving in ecosystems and how scientists develop evidence based arguments. In the Weather and Water unit, students collect and analyze data from a local digital weather station. They conduct experiments and create models to learn about particle theory, the water cycle, and water conservation. In the new Changes in Matter units, students explore their identity as scientists as they conduct experiments, and observe physical and chemical changes.

Social Studies

Utilizing the state's Investigating History curriculum, fifth-grade students study North American history from the precolonial and colonial period through the Civil War and Reconstruction, and then study the 20th-century movements for civil rights for all people. Underpinning the approach to the 5th-grade curriculum is the view that the United States has been shaped by the experiences, contributions, and perspectives of diverse peoples. The promise and potential of the nation's founding values and democratic government are perhaps the central message of the year as a whole, and the lessons provide a path to critically examine the nation's founding, expansion, and efforts to become "a more perfect Union" throughout the 19th and 20th centuries. The four units of study are (1) early colonization and the growth of the American colonies; (2) the American Revolution and principles of US government; (3) the growth of the Republic; and (4) slavery, the legacy of the Civil War, and the struggle for civil rights for all.

Visual Art

In fifth grade, students continue to expand their awareness and sensitivity to include more challenging, in depth subjects using a variety of media and techniques, and are able to create works of art that show abstraction. Focus continues to be on self-expression using a variety of mediums. Students use problem solving, observation, analysis, and self-assessment to create, analyze, and refine works of art. They express specific concepts, including positive/negative space, using the elements of art and the principles of design. Students follow a sequential creating process and can communicate this process to others. Work includes drawing, painting, printmaking, collage and sculpture/construction. Instruction targets Visual Art domains of **Communications and Expression, Design and Composition, and Methods, Tools and Techniques** and addresses the Massachusetts Arts Curriculum Framework Categories of **Creating, Presenting, Responding, and Connecting**.

Music

Fifth grade music expands students' understanding of music concepts introduced previously with greater focus on performance, analysis, and composition. Instruction continues to focus on the use of a healthy singing voice with the goal of being able to accurately perform one and two part music as part of a Choral Ensemble. Students may elect to be part of the Instrumental Band and String Program. Instruction addresses the Massachusetts Arts Curriculum Framework Categories of **Creating, Presenting, Responding, and Connecting**.

Physical Education

The fifth grade elementary physical education program is designed to teach children motor skills and skill themes that are developmentally appropriate for their age. Motor skills are taught within the context of skill themes. "Skill themes are fundamental movements that are later modified into the more specialized patterns on which activities of increasing complexity are built. Once the basic skills are learned to a certain degree of proficiency, they are combined with other skills and used in a more complex setting, such as those found in dance, games, and gymnastics." (Graham, Parker, Holt/Hale, 1999)

Media & Digital Learning

The media and digital learning curriculum integrates information and technology literacy skills with classroom curriculum learning. Students participate in literature genre studies, particularly historical fiction. Students broaden their use of the Big 6 research method and use primary sources such as memoirs and journals to research the American Revolution, U.S. Government and the Expansion of the U. S. They write with publishing tools to support and demonstrate curriculum learning. They use a variety of reference books, electronic databases, pre-selected web sites, specified search engines, and directories. Students interpret visual information from graphs, charts, tables and images. Students develop curriculum projects using these resources and multimedia tools to write, organize, and present new understandings. This area of the curriculum is assessed within the context of the activity in which it is embedded.



NEEDHAM PUBLIC SCHOOLS

Grade 5 Progress Report Parent Brochure

The Progress Report

This progress report is intended to *complement* existing parent conferences and to provide you with additional information about your child's progress toward mastering grade-level learning expectations. It reflects the district's belief that students should be engaged in challenging academics as well as ongoing social emotional learning experiences that are grounded in clearly defined and developmentally appropriate standards.

This report is designed to communicate students' progress in a way that descriptively reflects what they know and are able to do in relation to the state curriculum standards. The parent brochure outlines the categories that are included in the report for each curriculum area and provides a description of the characteristics associated with proficiency in that category. Please note that:

- A student's achievement is reported separately from effort.
- In each reporting period, the skills that are taught are assessed against a benchmark.
- Numerical levels are used to report performance with respect to the grade level learning goals.
- The system is designed to describe how well a student is progressing with respect to mid and end-of-year grade level expectations, rather than in relation to other students in the class.
- Teachers use this information to inform instructional practices that address student learning needs.

Please keep in mind that this report represents just a snapshot of your child's progress at a particular point in time. The information presented here, in conjunction with your conference with the child's teacher, provides a more comprehensive picture of your child's overall progress.

All of the staff in the Needham Public Schools remain committed to working in partnership with you to provide a meaningful learning and growth experience for your child.

Proficiency Scale – SEL	
E	Established
D	Developing
B	Beginning
NY	Not yet observed
*	See separate progress monitoring report

Social Emotional Learning (SEL)

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.

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. The process of Social Emotional Learning is dynamic and lifelong. Social and emotional competencies change and grow influenced by an individual's developmental period, experiences, and external factors with no real "stopping point" to skill development. With this in mind, the proficiency scale for SEL measurement is meant to provide feedback about your child's current strengths and areas to focus on for continued growth.

English Language Arts (Reading)

Proficient readers read fluently with phrasing and expression. They use strategic actions to read grade level text accurately. Proficient readers use comprehension strategies, make and confirm predictions, and summarize important ideas. They are able to infer what's implied but not stated and synthesize text information with their own knowledge to create new understandings. They analyze texts, examining words that create sensory images or feelings, and evaluate and think critically about the ideas.

Proficient readers adjust their reading for different types of texts and genre across diverse cultures. They read to learn new information as well as for enjoyment. They are able to distinguish the characteristics of different genres, identify themes and main ideas, describe the influence of point of view, and find evidence from texts to support their thinking. They know how non-fiction texts are organized and how to use charts, graphs, diagrams and other features of informational texts. They know the structures and elements of fiction (e.g. plot, setting, characters, problem, solution). They understand literary and structural elements in poetry and other texts.

Proficient readers use language to communicate their ideas in discussions. They listen to other students' ideas, pose questions, and add their own information. They communicate their understandings of texts in written form and orally, using evidence to support their thinking

When researching, readers formulate and refine questions and arguments and select relevant information to back up claims and support their arguments. They are able to take notes, organize information using a variety of tools.

Language and Word Study--Students learn and apply new vocabulary. They use grammar knowledge (e.g. nouns, verbs, adjectives, adverbs) to read and write.

English/Language Arts (Writing)

In fifth grade, teachers look for evidence that a student can independently use the steps of the writing process. Students write in a variety of genres, including personal narrative, fiction, informational, and persuasive pieces. Multiple samples of writing inform a student's grade. They consider the audience when crafting their pieces. Because various genres are taught at different times during the year, a student's grade in June could differ from that in January.

Writing process--Proficient writers understand the writing process and use appropriate prewriting strategies prior to drafting. They create multiple drafts, revisiting and editing independently as well as by utilizing feedback from adults and peers. They reread and revise their writing for clarity of ideas, improved organization, voice, word choice, and sentence fluency.

Structure—Proficient writers create an engaging introduction and an ending that provides closure for the reader. They use transitional words correctly and develop organized, focused multi-paragraph text structures appropriate to the genre.

Development--Proficient writers produce well-developed, organized pieces with clear focus. They use effective details to develop ideas and specific words and phrases appropriate to genre to enhance writing. Proficient writers develop voice appropriate to the genre.

Conventions--Proficient writers apply rules for punctuation, grammar and usage, paragraphing and capitalization. They spell words correctly in isolation and in their writing. They reread and edit their work independently.

Mathematics

Needham's elementary mathematics program balances mathematical skill fluency with the development of conceptual understanding and problem solving within the following domains of the Massachusetts Common Core standards:

Operations & Algebraic Thinking-- Proficient students are able to use number facts to solve for unknown quantities. They can write and interpret numerical expressions and patterns.

Number & Operations in Base Ten— Proficient students can read, write, compare, and round decimals. They multiply multi-digit whole numbers using the standard algorithm. They divide multi-digit numbers using place value or properties of operations. They add, subtract, multiply and divide decimals to the hundredths place using models and place value strategies.

Number & Operations—Fractions— Proficient students can add, subtract, and multiply fractions and mixed numbers. Students divide unit fractions by whole numbers and whole numbers by unit fractions. They solve real world problems involving multiplication and division of fractions.

Geometry & Measurement-- Proficient students understand volume measurement, and use multiplication and addition to find the volume of figures. They solve real world problems involving volume. They can locate and plot points on the coordinate plane in the first quadrant. They convert measurement units within a given measurement system (e.g., within metric system).

Standards for Mathematical Practice-- The Standards for Mathematical Practice describe the types of thinking and behaviors students engage in as they are doing mathematics. Proficient students make sense of problems and persevere in solving them. They know how to select and use appropriate tools to solve problems. They communicate clearly about their mathematical ideas. They listen to, make connections to, and offer feedback about the ideas of others.

Proficiency Scale - Academic	
4	In addition to meeting the standard, the student is able to make in-depth inferences and applications that extend beyond what was taught. The student exceeds the January/June standard.
3	The student meets the January/June standard.
2	The student is progressing towards meeting the January/June standard.
1	The student needs more review & reinforcement, requires constant teacher support and assistance to learn and use information. The student is having difficulty meeting the January/June standard.
-	Not taught during this reporting period.
*	See separate progress monitoring report.