

# Guide to Student Learning in First Grade



*The student learning guide provides valuable information on what students learn in first grade.  
Use this information to support and reinforce learning at home.*

At primary schools, all students will acquire foundational literacy and math skills in child-centered learning environments. The primary-school program engages students in a variety of literacy experiences and interactions that introduce and reinforce essential literacy skills and strategies.

Classroom instruction is shaped by the guiding principle that all students must acquire the foundational reading and writing skills necessary to be strategic readers, thinkers, and writers. Language, reading, and writing skills are explicitly taught during English Language Arts instruction. Social studies and science instruction are used to apply and reinforce literacy skills as students use oral language, reading, and writing skills to learn essential understanding.

Information and Communication Technology (ICT) instruction is embedded into all content areas. The district provides each student with a device to introduce students to the use of technology tools for communication, collaboration, creativity, and critical thinking.

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## English Language Arts (ELA)

First-grade students will continue to participate in daily classroom activities that are aligned with the cognitive science behind how students acquire reading and writing ability. Students will apply their foundational knowledge to text and will continue to use their literacy skills in science, social studies, and health instruction.

**READING:** First-grade students are continuing to increase their knowledge of the word-reading skills that are a necessary component of an early literacy reading program. Students will gain exposure to a range of texts and tasks of multiple genres, while at the same time building background knowledge and vocabulary awareness.

**WRITING:** First-grade students write in a variety of genres including narrative, informational, and opinion. Students will apply their writing skills in a variety of ways, including “how to” books, stories, and research projects.

**SPEAKING AND LISTENING:** Students will understand that being competent in speaking and listening will allow them to take advantage of new opportunities for communication. Students will listen and speak to understand, interact socially, extend discussion, and discuss content.

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# Mathematics

In first grade, instructional time is focused on four critical areas that will enable students to:

## **Develop an understanding of strategies for addition and subtraction within 20**

- Students develop strategies for adding and subtracting whole numbers.
- Students model mathematical situations of joining together and take apart to develop understanding of addition and subtraction.
- Students use properties of addition to add whole numbers and develop the strategy of making a 10 to solve addition and subtraction problems within 20.
- Students build an understanding of the relationship between addition and subtraction.

## **Develop an understanding of whole number relationships and place value, including grouping in tens and ones**

- Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10.
- Students compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes.
- Students begin to think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a 10 and some ones).
- Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.

## **Develop an understanding of linear measurement and measuring lengths as iterating length units**

- Students develop an understanding of the meaning and processes of measurement, including underlying concepts, such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement.

## **Reason about attributes of, and composing and decomposing geometric shapes**

- Students compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral) and build understanding of part-whole relationships, as well as the properties of the original and composite shapes.
- As they combine shapes, students recognize them from different perspectives and orientations, describe their geometric attributes and determine how they are alike and different.

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## Social Studies

In first grade, students learn about “My Family and Other Families, Now and Long Ago.” Students develop an awareness of cultural diversity. Students learn about how families live and work together to meet their needs and wants. Students explore different aspects of the economy such as jobs, transportation, income, saving, spending, and recycling. Students begin to learn about the geographical concepts of city, state, and nation. First grade Social Studies unit topics and learning outcomes include:

### **Rights, Responsibilities and Roles of Citizenship**

- Citizenship and what makes a good citizen.
- Famous Americans and national holidays.
- How governments help to create peace and protect the rights of individuals and groups.

### **Families: My Family and Other Families**

- Describe similarities and differences in families, customs, and traditions.
- Families change over time.

### **Geography: Places in My Community and Local Region**

- Maps and map tools, such as legends and cardinal directions, can help us navigate from one place to the next, provide directions, or trace important routes.
- Maps are used to locate important places in the community, state, and nation.

### **Economic Choices: Meeting our Needs and Wants**

- People make economic choices as producers and consumers of goods and services.
- People and families work to earn money to purchase goods and services.
- People make decisions about how to spend and save the money they earn.

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## Science

In first grade, science instruction will help to foster an understanding of scientific facts, concepts, and methods through hands-on learning and use of informational text. Students will participate in a variety of activities to deepen their understanding of the following scientific **core ideas**:

### **Sky Patterns**

- Explore seasonal patterns in sunrise and sunset
- Observe, describe and predict patterns of the motion of the sun, moon and stars
- Investigate phases of the moon

### **Weather and Climate**

- Identify the patterns of weather in New York State
- Describe how forecasts can help us to prepare/ respond to severe weather
- Observe the sun’s effect on the surface of our Earth

### **Waves: Light and Sound**

- Explore the relationship between sound and vibrations
- Observe and communicate information on how light interacts with materials
- Use engineering practices to solve problems

**The crosscutting concepts** of patterns, cause and effect, structure and function, and influence of engineering/technology/science on society and the natural world are identified as organizing concepts for the core ideas listed above. The first-grade performance expectations rely heavily on students’ abilities to utilize grade-appropriate **science and engineering practices**, such as planning and carrying out investigations, analyzing data, constructing explanations and designing solutions, and obtaining, evaluating, and communicating information. Students are expected to use these practices to demonstrate their understanding of the core ideas listed above.

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## Health

In first grade, the health curriculum will teach children about physical wellness and emotional balance, and promote positive self-esteem. Children will acquire information on a variety of topics and develop a greater understanding of how to set goals and make decisions that lead to a healthy life.

There are five units of study.

- Respecting Myself & Others (Violence Prevention Strand, and core elements of Mental Health)
- My Immune System
- My Family, My Self
- Tobacco, Alcohol & Other Drugs
- Safety Rules

Students also will continue to be encouraged to demonstrate effective communication and identify the people or systems they should turn to for support during emotional or physically harmful situations.

Helping students learn to respect themselves and to respect others is an important component of health education at all grade levels.

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## Physical Education

During physical education class, first-grade students begin to build body-space awareness, eye-hand coordination, and rhythm through simple games and sports, gymnastics, and dance. The units of study for first grade are:

- Fitness
- Fundamental movement skills/games
- Low organizational and recreational games
- Music/movement/rhythms
- Bowling
- Educational gymnastics
- Positive Behavioral Interventions and Supports (PBIS)

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## Music

In first grade, students learn to differentiate between speaking, whispering, shouting and singing. They learn to play instruments and use manipulatives to reinforce music concepts. Students learn about the music elements: rhythm, melody, harmony, and form. They are able to echo and repeat rhythmic and melodic patterns, reading very simple notation, such as sol-mi and quarter-eighth notes. Students create music as a class and learn to improvise with simple rhythmic and melodic patterns and with their singing voice. They learn to tell the difference between beat and rhythm, and explore music concepts through contrasts, such as high-low, loud-soft, fast-slow, and contrasting A-B sections of music. Students begin to learn a repertoire of music that helps to establish routines, impart information, and connects to content learned in other classes. They learn American folk songs and multicultural songs and perform for each other and their teachers. They listen to, describe, and analyze music examples played in class.

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## Art

In first grade art, students will build their art vocabulary to discuss art, describe the process of making art and explain their perceptions and feelings about art. They will continue to draw, paint, and create forms while expanding the variety of media and tools they use. Students learn about the art elements: line, shape, color, form, texture, and space. Students this age are interested in familiar subjects, such as family and animals, and may use these as subjects in their art work. Students are introduced to famous artworks that exemplify the use of line types, geometric shapes, primary colors, real texture, and overlapping objects. With teacher guidance, students begin to analyze works of art and explore cross-curricular connections. In so doing, they are inspired to create original artworks from their imagination that incorporate these elements.