

Math Standards

Kindergarten

MA.K.G.2.4	Interpret the physical world with geometric shapes and describe it with corresponding vocabulary.
MA.K.G.2.5	Use basic shapes, spatial reasoning, and manipulatives to model objects in the environment and to construct more complex shapes.

1st Grade

MA.1.G.3.1	Use appropriate vocabulary to compare shapes according to attributes and properties such as number and lengths of sides, and number of vertices.
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2nd Grade

MA.2.G.3.1	Estimate and use standard units, including inches and centimeters, to partition and measure lengths of objects.
MA.2.G.3.4	Estimate, select an appropriate tool, measure, and/or compute lengths to solve problems.

3rd Grade

MA.3.G.5.1	Select appropriate units, strategies and tools to solve problems involving perimeter.
MA.3.G.5.2	Measure objects using fractional parts of linear units such as $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{10}$.

4th Grade

MA.4.G.3.1	Describe and determine area as the number of same-sized units that cover a region in the plane, recognizing that a unit square is the standard unit for measuring area.
MA.4.G.3.2	Justify the formula for the area of the rectangle “area = base x height.”
MA.4.G.3.3	Select and use appropriate units, both customary and metric, strategies, and measuring tools to estimate and solve real-world area problems.

5th Grade

MA.5.G.3.2	Describe, define and determine surface area and volume of prisms by using appropriate units and selecting strategies and tools.
MA.5.G.5.2	Compare, contrast, and convert units of measure within the same dimension (length, mass, or time) to solve problems.
MA.5.G.5.3	Solve problems requiring attention to approximation, selection of appropriate measuring tools, and precision of measurement.

6th Grade

MA.6.G.4.3	Determine a missing dimension of a plane figure or prism, given its area or volume and some of the dimensions, or determine the area or volume given the dimensions.
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Science Standards

Kindergarten

Benchmark Number: SC.K.E.5.4

Benchmark Description: Observe that sometimes the Moon can be seen at night and sometimes during the day.

Benchmark Number: SC.K.E.5.5

Benchmark Description: Observe that things can be big and things can be small as seen from Earth.

Benchmark Number: SC.K.E.5.6

Benchmark Description: Observe that some objects are far away and some are nearby as seen from Earth.

1st Grade

Benchmark Number: SC.K.N.1.1

Benchmark Description: Collaborate with a partner to collect information.

Benchmark Number: SC.K.N.1.2

Benchmark Description: Make observations of the natural world and know that they are descriptors collected using the five senses.

Benchmark Number: SC.K.N.1.3

Benchmark Description: Keep records as appropriate -- such as pictorial records -- of investigations conducted.

Benchmark Number: SC.K.N.1.4

Benchmark Description: Observe and create a visual representation of an object, which includes its major features.

Benchmark Number: SC.K.N.1.5

Benchmark Description: Recognize that learning can come from careful observation.

Benchmark Number: SC.1.E.5.3

Benchmark Description: Investigate how magnifiers make things appear bigger and help people see things they could not see without them.

Benchmark Number: SC.1.E.6.3

Benchmark Description: Recognize that some things in the world around us happen fast and some happen slowly.

Benchmark Number: SC.1.N.1.2

Benchmark Description: Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and motion, and compare their observations with others.

Benchmark Number: SC.1.N.1.3

Benchmark Description: Keep records as appropriate - such as pictorial and written records - of investigations conducted.

Benchmark Number: SC.1.N.1.4

Benchmark Description: Ask, "how do you know?" in appropriate situations.

2nd Grade

Benchmark Number: SC.2.N.1.2

Benchmark Description: Compare the observations made by different groups using the same tools.

Benchmark Number: SC.2.N.1.3

Benchmark Description: Ask, "how do you know?" in appropriate situations and attempt reasonable answers when asked the same question by others.

Benchmark Number: SC.2.N.1.5

Benchmark Description: Distinguish between empirical observation (what you see, hear, feel, smell, or taste) and ideas or inferences (what you think).

Benchmark Number: SC.2.N.1.6

Benchmark Description: Explain how scientists alone or in groups are always investigating new ways to solve problems.

Benchmark Number: SC.2.P.8.1

Benchmark Description: Observe and measure objects in terms of their properties, including size, shape, color, temperature, weight, texture, sinking or floating in water, and attraction and repulsion of magnets.

Benchmark Number: SC.2.E.6.1

Benchmark Description: Recognize that Earth is made up of rocks. Rocks come in many sizes and shapes.

Benchmark Number: SC.2.E.6.3

Benchmark Description: Classify soil types based on color, texture (size of particles), the ability to retain water, and the ability to support the growth of plants.

3rd Grade

Benchmark Number: SC.3.N.1.1

Benchmark Description: Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

Benchmark Number: SC.3.N.1.2

Benchmark Description: Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.

Benchmark Number: SC.3.N.1.3

Benchmark Description: Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.

Benchmark Number: SC.3.N.1.4

Benchmark Description: Recognize the importance of communication among scientists.

Benchmark Number: SC.3.N.1.5

Benchmark Description: Recognize that scientists question, discuss, and check each others' evidence and explanations.

Benchmark Number: SC.3.N.1.6

Benchmark Description: Infer based on observation.

Benchmark Number: SC.3.N.1.7

Benchmark Description: Explain that empirical evidence is information, such as observations or measurements, that is used to help validate explanations of natural phenomena.

Benchmark Number: SC.3.N.3.2

Benchmark Description: Recognize that scientists use models to help understand and explain how things work.

Benchmark Number: SC.3.N.3.3

Benchmark Description: Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.

Benchmark Number: SC.3.P.8.3

Benchmark Description: Compare materials and objects according to properties such as size, shape, color, texture, and hardness.

4th Grade

Benchmark Number: SC.4.E.5.2

Benchmark Description: Describe the changes in the observable shape of the moon over the course of about a month.

Benchmark
Number: SC.4.E.5.4

Benchmark
Description: Relate that the rotation of Earth (day and night) and apparent movements of the Sun, Moon, and stars are connected.

Benchmark Number: SC.4.E.5.5

Benchmark Description: Investigate and report the effects of space research and exploration on the economy and culture of Florida.

Benchmark Number: SC.4.E.6.1

Benchmark Description: Identify the three categories of rocks: igneous, (formed from molten rock); sedimentary (pieces of other rocks and fossilized organisms); and metamorphic (formed from heat and pressure).

Benchmark
Number: SC.4.E.6.5

Benchmark
Description: Investigate how technology and tools help to extend the ability of humans to observe very small things and very large things.

Benchmark
Number: SC.4.N.1.1

Benchmark
Description: Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

Benchmark Number: SC.4.N.1.2

Benchmark Description: Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.

Benchmark Number: SC.4.N.1.3

Benchmark Description: Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.

Benchmark Number: SC.4.N.1.4

Benchmark Description: Attempt reasonable answers to scientific questions and cite evidence in support.

Benchmark Number: SC.4.N.1.5

Benchmark Description: Compare the methods and results of investigations done by other classmates.

Benchmark Number: SC.4.N.1.6

Benchmark Description: Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.

Benchmark Number: SC.4.N.1.7

Benchmark Description: Recognize and explain that scientists base their explanations on evidence.

Benchmark Number: SC.4.N.1.8

Benchmark Description: Recognize that science involves creativity in designing experiments.

Benchmark Number: SC.4.N.2.1

Benchmark Description: Explain that science focuses solely on the natural world.

Benchmark Number: SC.4.N.3.1

Benchmark Description: Explain that models can be three dimensional, two-dimensional, an explanation in your mind, or a computer model.

Benchmark Number: SC.4.P.8.1

Benchmark Description: Measure and compare objects and materials based on their physical properties including: mass, shape, volume, color, hardness, texture, odor, taste, attraction to magnets.

5th Grade

Benchmark Number: SC.5.E.5.3

Benchmark Description: Distinguish among the following objects of the Solar System -- Sun, planets, moons, asteroids, comets -- and identify Earth's position in it.

Benchmark Number: SC.5.N.1.1

Benchmark Description: Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such

as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.

Benchmark Number: SC.5.N.1.5

Benchmark Description: Recognize and explain that authentic scientific investigation frequently does not parallel the steps of "the scientific method."

Benchmark
Number: SC.5.N.2.1

Benchmark
Description: Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence.

Benchmark Number: SC.5.N.2.2

Benchmark Description: Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.

Benchmark Number: SC.5.P.8.1

Benchmark Description: Compare and contrast the basic properties of solids, liquids, and gases, such as mass, volume, color, texture, and temperature.

6th Grade

Benchmark Number: SC.6.N.1.4

Benchmark Description: Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.

Benchmark Number: SC.6.N.1.5

Benchmark Description: Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.

Benchmark Number: SC.6.N.2.2

Benchmark Description: Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered.

Reading/Language Arts Standards

Kindergarten

Benchmark Number: LA.K.1.6.1

Benchmark Description: The student will use new vocabulary that is introduced and taught directly.

Benchmark Number: LA.K.1.6.2

Benchmark Description: The student will listen to and discuss both familiar and conceptually challenging text.

Benchmark Number: LA.K.1.6.6

Benchmark Description: The student will relate new vocabulary to prior knowledge.

Benchmark
Number: LA.K.1.7.1

Benchmark
Description: The student will make predictions about text content using pictures, background knowledge, and text features (e.g., title, sub-heading, captions, illustrations).

Benchmark Number: LA.K.1.7.2

Benchmark Description: The student will use background knowledge, supporting details from text, or another source to determine whether a reading selection is fact or fiction.

Benchmark Number: LA.K.2.2.1

Benchmark Description: The student will identify the purpose of nonfictional text.

Benchmark Number: LA.K.2.2.2

Benchmark Description: The student will retell important facts from a text heard or read.

Benchmark Number: LA.K.5.2.2

Benchmark Description: The student will listen attentively to fiction and nonfiction read-alouds and demonstrate understanding.

Benchmark Number: LA.K.6.2.1

Benchmark Description: The student will ask questions and recognize the library media specialist or teacher as an information source.

1st Grade

Benchmark Number: LA.1.1.6.1

Benchmark Description: The student will use new vocabulary that is introduced and taught directly.

Benchmark Number: LA.1.1.6.2

Benchmark Description: The student will listen to, read, and discuss both familiar and conceptually challenging text.

Benchmark Number: LA.1.1.6.5

Benchmark Description: The student will relate new vocabulary to prior knowledge.

Benchmark Number: LA.1.2.2.3

Benchmark Description: The student will organize information found in nonfiction text through charting, listing, mapping, or summarizing.

Benchmark Number: LA.1.5.2.3

Benchmark Description: The student will listen attentively to fiction and nonfiction read-alouds and demonstrate understanding.

2nd Grade

Benchmark Number: LA.2.1.6.1

Benchmark Description: The student will use new vocabulary that is introduced and taught directly.

Benchmark Number: LA.2.1.6.2

Benchmark Description: The student will listen to, read, and discuss familiar and conceptually challenging text.

3rd Grade

Benchmark Number: LA.3.1.6.5

Benchmark Description: The student will relate new vocabulary to familiar words.

Benchmark Number: LA.3.1.7.1

Benchmark Description: The student will identify a text's features (e.g., title, subheadings, captions, illustrations), use them to make and confirm predictions, and establish a purpose for reading.

Benchmark Number: LA.3.2.2.3

Benchmark Description: The student will organize information to show an understanding of main ideas within a text through charting, mapping, or summarizing.

4th Grade

Benchmark Number: LA.4.1.6.1

Benchmark Description: The student will use new vocabulary that is introduced and taught directly.

Benchmark Number: LA.4.1.6.2

Benchmark Description: The student will listen to, read, and discuss familiar and conceptually challenging text.

Benchmark Number: LA.4.2.2.3

Benchmark Description: The student will organize information to show an understanding of main ideas within a text through charting, mapping, or summarizing.

5th Grade

Benchmark Number: LA.5.1.6.1

Benchmark Description: The student will use new vocabulary that is introduced and taught directly.

Benchmark Number: LA.5.1.6.2

Benchmark Description: The student will listen to, read, and discuss familiar and conceptually challenging text.

Benchmark Number: LA.5.1.7.1

Benchmark Description: The student will explain the purpose of text features (e.g., format, graphics, diagrams, illustrations, charts, maps), use prior knowledge to make and confirm predictions, and establish a purpose for reading.

Benchmark Number: LA.5.1.7.8

Benchmark Description: The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.

Benchmark Number: LA.5.2.2.3

Benchmark Description: The student will organize information to show understanding (e.g., representing main ideas within text through charting, mapping, paraphrasing, or summarizing).

6th Grade

Benchmark Number: LA.6.1.6.1

Benchmark Description: The student will use new vocabulary that is introduced and taught directly.

Benchmark Number: LA.6.1.6.2

Benchmark Description: The student will listen to, read, and discuss familiar and conceptually challenging text.

Benchmark Number: LA.6.1.7.1

Benchmark Description: The student will use background knowledge of subject and related content areas, prereading strategies, graphic representations, and knowledge of text structure to make and confirm complex predictions of content, purpose, and organization of a reading selection.

Benchmark Number: LA.6.1.7.8

Benchmark Description: The student will use strategies to repair comprehension of grade-appropriate text when self-monitoring indicates confusion, including but not limited to rereading, checking context clues, predicting, note-making, summarizing, using graphic and semantic organizers, questioning, and clarifying by checking other sources.

Benchmark Number: LA.6.2.2.3

Benchmark Description: The student will organize information to show understanding. (e.g., representing main ideas within text through charting, mapping, paraphrasing, summarizing, or comparing/contrasting)