

Lakeview Public Schools
Science Curriculum
By Course, Standard, Benchmark
Kindergarten Science

SC01 Understands basic features of the Earth

2341 01 Knows the difference between land and water

2342 02 Knows that water can be a liquid or a solid

2343 03 Knows that weather can change from day to day and season to season

SC07 Understands how species depend on one another and on the environment for survival

2348 01 Knows that animals require air, water, and food

2356 02 Knows that plants require, air, water, light

SC10 Understands basic concepts about the structure and properties of matter

6309 01 Knows that objects have physical properties

2350 02 Knows that objects can be described and grouped by their physical properties

SC14 Understands the nature of scientific knowledge and inquiry

2354 01 Knows how the five senses can provide information about the world

2355 02 Developing skills for making predictions and observations

Lakeview Public Schools
Science Curriculum
By Course, Standard, Benchmark
1st Grade Science

SC01 Understands basic features of the Earth

2358 01 Knows that earth materials consist of rocks, soils, water, and air

SC04 Understands diversity and unity that characterize life

2362 01 Knows that animals and plants and animals have external features that help them live in different environments

2360 02 Knows things are either living or nonliving

SC07 Understands how species depend on one another and on the environment for survival

2366 01 Knows that living things are found almost everywhere in the world; different types of plants and animals live in different places

2365 02 Knows plants and animals need space to live

SC08 Understands the cycling of matter and flow of energy through the living environment

2367 01 Knows that animals eat plants or other animals for food

SC10 Understands basic concepts about the structure and properties of matter

2369 01 Classifies objects by multiple physical properties

SC13 Understands the kind of forces that exist between objects and within atoms

2372 01 Knows that magnets can be used to make some things move without being touched

SC14 Understands the nature of scientific knowledge and inquiry

2374 01 Knows that learning can come from predictions, careful observations, and simple experiments

Lakeview Public Schools
Science Curriculum
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2nd Grade Science

SC01 Understands basic features of the Earth

2379 01 Knows the Earth is made up of the crust, the mantle, and the core

0080 02 Describes seasonal changes in weather

SC02 Understands basic Earth processes

0079 01 Knows that water can be a liquid, a solid or a gas and can be converted from one form to the other, but the amount of water stays the same

SC07 Understands how species depend on one another and on the environment for survival

0090 01 Knows the life cycle of plants and animals

0089 02 Knows that seeds are dispersed by living and nonliving sources

0088 03 Knows that plants and animals depend on one another for survival

SC09 Understands basic concepts of the evolution of species

2399 01 Knows that fossils provide evidence that some organisms living long ago are now extinct

SC10 Understands basic concepts about the structure and properties of matter

0095 01 Describe common physical changes in matter size, shape, melting, freezing, and dissolving

SC14 Understands the nature of scientific knowledge and inquiry

0104 01 Uses tools like thermometers, lenses, rulers, and balances to collect information

7382 02 Uses the scientific method, by conducting a simple investigation

7383 03 Introduces SI units of measures

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3rd Grade Science

SC03 Understands the composition and structure of the universe and the Earth's place in it

- 2409 01 Describes the motion of the earth in relationship to the sun and moon
- 2660 02 Knows that the rotation of earth on its axis every twenty-four hours produces the night and day cycle
- 0085 03 Knows that the moon goes through phases
- 2382 04 Knows that the sun provides the light and heat necessary to maintain the temperature of earth
- 7385 05 Knows that the sun can be seen only in daytime, whereas the moon is out all the time

SC11 Understands energy types, sources, and conversions

- 2712 01 Knows that sound is created by vibrations that travel in wave patterns
- 2713 02 Knows that sound has different pitches and can vary in loudness
- 4903 03 Knows that sounds travel differently through different mediums
- 4904 04 Knows that light comes from different sources and can vary in brightness
- 4905 05 Knows that light can reflect differently from different objects
- 4906 06 Knows how shadows are created

SC12 Understands motion and the principles that explain it

- 2408 01 Knows that when a force is applied to an object, the object either speeds up, slows down, or goes in a different direction
- 7384 02 Can manipulate simple mechanical devices and explain how they work

SC13 Understands the kind of forces that exist between objects and within atoms

- 2410 01 Describes how earth's gravity pulls any object toward it without touching it

SC14 Understands the nature of scientific knowledge and inquiry

- 2412 01 Knows that science is one way of answering questions and explaining the natural world
- 2411 02 Knows that the same scientific investigation often gives slightly different results when it is carried out by different persons, or at different times or places
- 2413 03 Knows that scientists use different kinds of investigations (e.g., observation of nature, data collection) depending on the questions they are trying to answer

Lakeview Public Schools
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4th Grade Science

SC01 Understands basic features of the Earth

- 5837 01 Describes the layers of the Earth and their composition
2659 02 Describes the composition and structure of the atmosphere

SC02 Understands basic Earth processes

- 2662 01 Knows that smaller rocks come from the breaking and weathering of bedrock and larger rocks
2663 02 Knows that rock is composed of different combinations of minerals
2385 03 Knows that soil is made up of weathered rock and products of plants and animals, and contains many living organisms
2386 04 Identifies and describes how waves, wind, water, and ice constantly change earth's land surface by eroding rock and soil in some areas and depositing them in other areas
2666 05 Classifies and identifies surface of earth changes; some changes are due to slow processes (e.g., erosion, weathering), and some changes are due to rapid processes (e.g., landslides, volcanoes, earthquakes)
2667 06 Knows that fossils provide evidence about the plants and animals that lived long ago and the nature of the environment at that time
5836 07 Describes and explains the rock cycle
7428 08 Knows that different types of rocks originate from different processes; igneous, sedimentary, metamorphic

SC04 Understands diversity and unity that characterize life

- 2671 01 Describes characteristics and classifies vertebrates and invertebrates
6306 02 Describes the parts and life cycle of a seed plant
6305 03 Knows the requirements and products of photosynthesis

SC11 Understands energy types, sources, and conversions

- 2693 01 Knows the differences between conductors and insulators
2694 02 Knows that an electrical circuit requires a complete loop in order for the electrical current to flow
2695 03 Knows that heat can be produced in many ways (e.g., burning, rubbing, mixing chemicals)
2696 04 Knows that electricity in circuits can produce light, heat, sound, and magnetic effects
4907 05 Knows the differences between static and current electricity

Lakeview Public Schools
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5th Grade Science

SC03 Understands the composition and structure of the universe and the Earth's place in it

- 0663 01 Knows that planets are different sizes, have different surface features, and compositions
- 2388 02 Knows that earth is one of several planets that orbit the sun, and the moon orbits around earth
- 0664 03 Know that the earth is a part of a system of planets orbiting the sun while a variety of objects orbit the earth and that other planets may have objects orbiting them
- 2669 04 Knows the names of the planets and their order out from the sun
- 0666 05 Knows that the sun's gravitational pull keeps earth and other planets in their orbits, just as the gravitational pull of planets keeps their moons in orbit around them
- 2670 06 Knows that earth revolves around the sun once every year
- 0667 07 Knows that many pieces of rock and ice (i.e., meteors, comets, and asteroids) orbit the sun
- 0669 08 Knows that the Sun is found in the Milky Way Galaxy

SC07 Understands how species depend on one another and on the environment for survival

- 2680 01 Describes how the behavior of individual organisms is influenced by internal and external stimuli
- 2681 02 Describes primary and secondary succession
- 2683 03 Describes how all organisms (including humans) cause changes in the environment where they live; some of these changes are detrimental to themselves or other organisms, and others are beneficial
- 2686 04 Knows that all species ultimately depend on one another through symbiotic/mutual relationships
- 0606 05 Knows the concepts of population, community, and ecosystem
- 2392 06 Knows that plants or animals have varied characteristics which serve different functions in survival
- 7391 07 Knows that the number and types of organisms an ecosystem can support depend on the availability of resources, abiotic, and biotic factors (e.g., competition between species, quantity of light and water, temperature range, and soil composition)
- 2394 08 Knows that when an environment changes, some plants and animals survive and reproduce and others die or move to new locations
- 5839 09 Knows the basic requirements needed to maintain life

SC08 Understands the cycling of matter and flow of energy through the living environment

- 2684 01 Explains the life cycle
- 2685 02 Describes the energy cycle using food chains and food webs

2398 03 Knows that over the entire earth, organisms are growing, dying, and decaying

SC10 Understands basic concepts about the structure and properties of matter

2689 01 Knows that things have properties (e.g., conductivity, density, solubility) that can be used to tell them apart and to find out which of them are alike

2691 02 Knows that the mass of a material is conserved whether it is together, in parts, or in a different state

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5th Grade Science

SC14 Understands the nature of scientific knowledge and inquiry

- 2701 01 Plans and conducts a simple investigation (e.g., problem, hypothesis, experiment, collection, conclusion)
- 2699 02 Uses the International System of Measurement
- 2703 03 Knows that scientists develop explanations using observations (evidence) and what they already know about the world (scientific knowledge); good explanations are based on evidence from investigations
- 2704 04 Knows that scientists make the results of their investigations public; they describe the investigations in ways that enable others to repeat the investigations