

Kindergarten Science Checklist

- o I can describe objects in terms of the materials they are made of (e.g., clay, cloth, paper) and their physical properties (e.g., color, size, shape, weight, texture, flexibility, attraction to magnets, floating, sinking). PS 1.A
- o I can understand water can be a liquid or a solid and can be made to change back and forth from one form to the other. PS. 1.B
- o I can understand water left in an open container evaporates (goes into the air) but water in a closed container does not. PS. 1.C
- o I can observe and describe similarities and differences in the appearance and behavior of plants and animals (e.g., seed-bearing plants, birds, fish, insects). LS.2.A
- o I can understand stories sometimes give plants and animals attributes they do not really have. [LS.2.B](#)
- o I can identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs). LS.2.C
- o I can describe characteristics of mountains, rivers, oceans, valleys, deserts, and local landforms. ES. 3.A
- o I can understand changes in weather occur from day to day and across seasons, affecting Earth and its inhabitants. ES.3.B
- o I can identify resources from Earth that are used in everyday life and understand that many resources can be conserved. ES.3.C

1st Grade Science Checklist

- o I can identify that solids, liquids, and gases have different properties. PS.1.A
- o I can identify the different plants and animals that inhabit different kinds of environments and have external features that help them thrive in different kinds of places. PS.1.B
- o I can understand that both plants and animals need water; animals need food, and plants need light. LS.2.B
- o I can understand that animals eat plants or other animals for food, and may also use plants or even other animals for shelter and nesting. LS.2.C
- o I can identify what animals eat from the shapes of their teeth (e.g., sharp teeth: eats meat; flat teeth: eats plants). LS.2.D
- o I can understand that roots are associated with the intake of water and soil nutrients, and green leaves are associated with making food from sunlight. LS.2.E
- o I can show how to use simple tools (e.g., thermometer, wind vane) to measure weather conditions and record changes from day to day, and across the seasons. ES. 3.A
- o I can recognize that the weather changes from day to day, but trends in temperature like rain or snow tend to be predictable during a season. ES.3.B
- o I can understand that the sun warms the land, air, and water. ES.3.C

2nd Grade Science Checklist

- o I can identify the sequential stages of life cycles are different for different animals, such as butterflies, frogs, and mice. LS.2.B
- o I can understand that many characteristics of an organism are inherited from the parents and some characteristics are caused or influenced by the environment. LS.2.C
- o I can understand there is variation among individuals of one kind within a population. LS.2.D

- I can explain how light, gravity, touch, or environmental stress can affect the germination, growth, and development of plants. LS.2.E
- I can understand that flowers and fruits are associated with reproduction in plants. LS.2.F
- I can compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals. ES. 3.A
- I can understand that smaller rocks come from the breakage and weathering of larger rocks. ES.3.B
- I can understand that soil is made partly from weathered rock and partly from organic materials and that soils differ in their color, texture, capacity to retain water, and ability to support the growth of many kinds of plants. ES.3.C
- I can understand that fossils provide evidence about the plants and animals that lived long ago and that scientists learn about the past history of Earth by studying fossils. ES.3.D
- I can explain how rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use. ES.3.E

3rd Grade Science Checklist

- I can understand that people once thought that earth, wind, fire, and water were the basic elements that made up all matter. Science experiments show that there are more than 100 different types of atoms, which are presented on the periodic table of the elements. PS. 1.I
- I can explain examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands. LS.3.B
- I can understand when the environment changes, some plants and animals survive and reproduce; others die or move to new locations. LS.3.D
- I can understand that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resemble others that are alive today. LS.3.E
- I can understand the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons. ES.4.A
- I can explain the way in which the Moon's appearance changes during the four-week lunar cycle. ES.4.B
- I can understand how the telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye. ES.4.C
- I can understand that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth. ES.4.D
- I can explain how the position of the Sun in the sky changes during the course of the day and from season to season. ES.4.E

4th Grade Science Checklist

- I can identify moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt, and mud in other places (weathering, transport, and deposition). ES.5.C
- I can identify natural processes, including freezing and thawing and the growth of roots, cause rocks to break down into smaller pieces. ES.5.B
- I can note changes in the earth are due to slow processes, such as erosion, and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes. ES.5.A

- o I can identify common rock-forming minerals (including quartz, calcite, feldspar, mica, and hornblende) and ore minerals by using a table of diagnostic properties. ES.4.B
- o I can differentiate among igneous, sedimentary, and metamorphic rocks by referring to their properties and methods of formation (the rock cycle). ES.4.A
- o I can identify that most microorganisms do not cause disease and that many are beneficial. LS.3.D
- o I can determine that many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter. LS.3.C
- o I can identify that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all. LS.3.B
- o I can show that ecosystems can be characterized by their living and nonliving components. LS.3.A
- o I can recognize decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals. LS.2.C

5th Grade Science Checklist

- o I can discuss causes and effects of different types of severe weather. ES.4.C
- o I can identify the origin of the water used by their local communities. ES.3.E
- o I can explain that the amount of freshwater located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water. ES.3.D