



SCIENCE STANDARDS, K-5

Kindergarten

➤ Science Process Skills

- Makes logical predictions.
- Draws conclusions based on results.
- Tests predictions.

Grade 1

➤ Life Science

- Demonstrates understanding that there are a variety of living things.
- Demonstrates understanding that living things have similar basic needs.

➤ Earth Science

- Demonstrates an understanding of local weather patterns.
- Demonstrates an understanding of ways to measure and/or determine the weather.

➤ Physical Science

- Can give examples of solids based on their properties.
- Can give examples of liquids based on their properties.

Grade 2

➤ Life Science

- Describes the life cycle of a butterfly.
- Shows an understanding of basic needs for growth in plants and animals.

➤ Earth Science

- Demonstrates knowledge of soil origin and soil components.
- Shows an understanding of the soil type that is best for plant growth.

➤ Physical Science

- Describes how sound is produced and demonstrates the relationship between rate of vibration and pitch of sounds.
- Describes the different ways that an object can move and demonstrates ways to change motion using a force.

Grade 3

➤ Life Science

- Recognizes that plants go through predictable life cycles.
- Identifies the structures of a plant and gives their specific function.
- Demonstrates understanding of plants as part of a food chain.

- Recognizes reasons for plant behaviors (i.e., a stem growing towards the light).
 - **Earth Science**
 - Identifies the way an organism's habitat provides for its basic needs.
 - Can give examples of ways organisms adapt to their habitat.
 - Understands the interdependency of organisms within their habitat.
 - **Physical Science**
 - Understands the properties of magnets.
 - Identifies simple machines and explains their use in daily life.
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Grade 4

- **Life Science**
 - Demonstrates knowledge of fossils and their role in our understanding of history.
 - **Earth Science**
 - Demonstrates knowledge of different minerals and their properties.
 - Demonstrates knowledge of the three categories of rocks.
 - Gives examples of how the surface of the earth changes due to processes like erosion, weathering, landslides, volcanic eruption, and earthquakes.
 - Recognizes that the earth is part of the solar system and describes the relationship between earth, moon, and sun.
 - **Physical Science**
 - Demonstrates an understanding of how electricity is produced.
 - Explains how to make a complete circuit and identifies different types of circuits.
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Grade 5

- **Life Science**
 - Recognizes and gives examples of adaptations of living things.
 - Describes how energy from the sun is transferred through a food chain.
- **Earth Science**
 - Explains weather concepts and the difference between weather and climate.
 - Describes the process of the water cycle Recognizes and discusses the different properties of soil and how water affects land.
- **Physical Science**
 - Compares and contrasts the three states of matter.
 - Describes how heat energy will cause changes in states.