

**Science
Grade 2**

Grade Band Theme: Observations of the Environment

This theme focuses on helping students develop the skills for systematic discovery to understand the science of the physical world around them in greater depth by using scientific inquiry.

Earth and Space Science (ESS)

Topic: The Atmosphere

This topic focuses on the air and water as they relate to weather and weather changes that can be observed and measured.

Content Statements

- The atmosphere is made up of air.
 - Air has properties that can be observed and measured. The transfer of energy in the atmosphere causes air movement, which is felt as wind. Wind speed and direction can be measured.
- Water is present in the air.
 - Water is present in the air as clouds, steam, fog, rain, ice, snow, sleet or hail. When water in the air cools (change of energy), it forms small droplets of water that can be seen as clouds. Water can change from liquid to vapor in the air and from vapor to liquid. The water droplets can form into raindrops. Water droplets can change to solid by freezing into snow, sleet or hail. Clouds are moved by flowing air.
- Long and short-term weather changes occur due to changes in energy.
 - Changes in energy affect all aspects of weather, including temperature, precipitation amount and wind.

Physical Science (PS)

Topic: Changes in Motion

This topic focuses on observing the relationship between forces and motion.

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Content Statements

- Forces change the motion of an object.
 - Motion can increase, change direction or stop depending on the force applied.
 - The change in motion of an object is related to the size of the force.
 - Some forces act without touching, such as using a magnet to move an object or objects falling to the ground.

Life Science (LS)

Topic: Interactions within Habitats

This topic focuses on how ecosystems work by observations of simple interactions between the biotic/living and abiotic/nonliving parts of an ecosystem. Just as living things impact the environment in which they live, the environment impacts living things.

Content Statements

- Living things cause changes on Earth.
 - Living things function and interact with their physical environments. Living things cause changes in the environments where they live; the changes can be very noticeable or slightly noticeable, fast or slow.
- Some kinds of individuals that once lived on Earth have completely disappeared, although they were something like others that are alive today.
 - Living things that once lived on Earth no longer exist; their basic needs were no longer met.