

Grade 2

Matter and its Interactions

1 Understand properties of solids and liquids and the changes they undergo. PS.2.1

- 1 Carry out investigations to illustrate examples of matter that can change from a solid to a liquid and from a liquid to a solid by heating and cooling. PS.2.1.1
- 2 Analyze and interpret data to compare the amount (volume and weight) of water in a container before and after freezing. PS.2.1.2
- 3 Analyze and interpret data to compare the amount (volume and weight) of water left in an open container over time to the water left in a closed container. PS.2.1.3

Waves and Their Applications in Technologies for Information Transfer

2 Understand the relationship between sound and vibrating objects. PS.2.2

- 1 Carry out investigations to illustrate how sound is produced by vibrating objects and columns of air. PS.2.2.1
- 2 Use models to summarize the relationship between sound and how sounds are produced and detected by parts of the body that vibrate. PS.2.2.2

From Molecules to Organisms- Structures and Processes

1 Understand animal life cycles. LS.2.1

- 1 Use models to summarize the life cycle of animals including: birth, developing into an adult, reproducing, aging and death. LS.2.1.1
- 2 Obtain, evaluate and communicate information to compare life cycles of different animals. LS.2.1.2

Heredity- Inheritance and Variation of Traits

2 Understand that organisms differ from or are similar to their parents and other offspring based on characteristics of the organism. LS.2.2

- 1 Obtain, evaluate, and communicate information to summarize ways in which animals closely resemble their parents and ways they are different. LS.2.2.1
- 2 Analyze and interpret data to illustrate variations among offspring of the same parents. LS.2.2.2

Earth's Systems

1 Understand patterns of weather and factors that affect weather. ESS2.1

- 1 Obtain, evaluate, and communicate information to summarize how energy from the sun serves as a source of light and warms the land, air, and water. ESS2.1.1
- 2 Use mathematics and computational thinking to summarize weather conditions (temperature, wind direction, wind speed, precipitation). ESS2.1.2
- 3 Carry out investigations to collect data and compare weather patterns that occur over time and relate observable patterns to time of day and time of year. ESS2.1.3

- 4 Obtain, evaluate and communicate information to recognize the tools scientists use for observing, recording, and predicting weather changes from day to day and during the season. [ESS2.1.4](#)