

4th Grade Science Guide

First Nine Weeks

Cells, Flow of Matter and Energy, Heredity

0407.1.1 Compare basic structures of plant and animal cells

0407.3.1 Determine how different organisms function within an environment in terms of their location on an energy pyramid

0407.4.1 Draw conclusions about the relationship between reproduction and the survival of a species

0407.4.2 Distinguish between complete and incomplete metamorphosis.

0407. INQ.1 Select an investigation that could be used to answer a specific question

0407. T/E.1 Select a tool, technology, or invention that was used to solve a human problem

0407. T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology

Interdependence, Biodiversity & Change

0407.2.1 Recognize the impact of predation and competition on an ecosystem

0407.5.1 Determine how a physical or behavioral adaptation can enhance the chances of survival

0407.5.2 Infer the possible reasons why a species became endangered or extinct

0407. INQ.1 Select an investigation that could be used to answer a specific question

0407. T/E.1 Select a tool, technology, or invention that was used to solve a human problem

0407. T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology

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Second Nine Weeks

The Universe, The Earth, The Atmosphere

0407.6.1 Organize the phases of the moon in the correct sequence

0407.6.2 Infer that the moon's phases are caused by the revolution of the moon and earth around the sun

0407.7.1 Design a simple model to illustrate how the wind and movement of water alter the earth's surface

0407.7.2 Analyze how different earth materials are utilized to solve human problems or improve the quality of life

0407.8.1 Identify the basic features of the water cycle and describe their importance to life on earth

0407.8.2 Distinguish between weather and climate

0407. INQ.1 Select an investigation that could be used to answer a specific question

0407. T/E.1 Select a tool, technology, or invention that was used to solve a human problem

0407. T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology

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Third Nine Weeks

Matter and Energy

- 0407.9.1 Choose an appropriate tool for measuring a specific physical property of matter
- 0407.9.2 Determine the mass, volume, and temperature of a substance or object using proper units of measurement
- 0407.9.3 Interpret the causes and effects of a physical change in matter
- 0407.10.1 Identify different forms of energy, such as heat, light, and chemical
- 0407.10.2 Determine which surfaces reflect, refract, or absorb light
- 0407.10.3 Determine whether a material is transparent, translucent, or opaque
- 0407. INQ.1 Select an investigation that could be used to answer a specific question
- 0407. T/E.1 Select a tool, technology, or invention that was used to solve a human problem
- 0407. T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology

Motion, Forces in Nature

- 0407.11.1 Describe the position of an object relative to fixed reference points
- 0407.11.2 Identify factors that influence the motion of an object
- 0407.11.3 Determine the relationship between speed and distance traveled over time
- 0407.12.1 Identify how magnets attract or repel one another
- 0407. 12.2 Determine how an electrically charged material interacts with other objects
- 0407.12.3 Determine the path of an electrical current in a simple circuit
- 0407. INQ.1 Select an investigation that could be used to answer a specific question
- 0407. T/E.1 Select a tool, technology, or invention that was used to solve a human problem
- 0407. T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology