

Fifth Grade Science

Light and Sound

- 1.3.2 Evaluates the work of others to determine evidence which scientifically supports or contradicts the results, identifying faulty reasoning or conclusions that go beyond evidence and/or are not supported by data.
- 2.4.1 Understands that when work is done energy may transform from one to another, including mechanical, heat, light, sound, electrical, chemical, and nuclear energy, yet is conserved.
- 2.4.2 Observes and communicates how light (electromagnetic) energy interacts with matter: transmitted, reflected, refracted, and absorbed.

Energy, Work, and Machines

- 1.3.3 Evaluates the work of others to determine evidence which scientifically supports or contradicts the results, identifying faulty reasoning or conclusions that go beyond evidence and/or are not supported by data.
- 2.3.2 Describes, measures, and represents data on a graph showing the motion of an object(position, direction of motion, speed)
- 2.3.3 Recognizes and describes examples of Newton's Laws of Motion
- 2.4.1 Understands that when work is done energy may transform from one to another, including mechanical, heat, light, sound, electrical, chemical, and nuclear energy, yet is conserved.

Plants

- 1.3.4 Evaluates the work of others to determine evidence which scientifically supports or contradicts the results, identifying faulty reasoning or conclusions that go beyond evidence and/or are not supported by data.
- 3.1.2 Relates the structure of cell, organs, tissues, organ systems, and whole organisms to their functions.
- 3.2.1 Differentiates between asexual and sexual reproduction of organisms.
- 3.3.1 Understands that internal and/or environmental conditions affect an organism's behavior and/or response in order to maintain and regulate stable internal conditions to survive in a continually changing environment.
- 3.4.1 Recognizes that all populations living together (biotic resources) and the physical factors (abiotic resources) with which they interact compose an ecosystem.
- 3.4.3 Traces the energy flow from the sun (source of radiant energy) to producers (via photosynthesis- chemical energy) to consumers and decomposers in food webs.

Populations and Ecosystems

- 3.4.2 Recognizes that all populations living together (biotic resources) and the physical factors (abiotic resources) with which they interact compose an ecosystem.
- 3.4.3 Traces the energy flow from the sun (source of radiant energy) to producers (via photosynthesis- chemical energy) to consumers and decomposers in food webs.
- 3.5.2 Understands that adaptations of organisms (changes in structure, function, or behavior that accumulates over successive generations) contribute to biological diversity.
- 3.5.3 Associates extinction of a species with environmental changes and insufficient adaptive characteristics.
- 3.2.1 Differentiates between asexual and sexual reproductions of organisms.
- 3.3.1 Understands that internal and/or environmental conditions affect

EARTH AND SPACE SCIENCE

- 4.1.1 Identifies properties of the solid earth, the oceans and fresh water, and the atmosphere.
- 4.1.2 Models Earth's cycles, constructive and destructive processes, and weather systems.
- 4.2.1 Understands that Earth processes observed today (including movement of lithospheric plates and changes in atmospheric conditions) are similar to those that occurred in the past: Earth history is also influenced by occasional catastrophes, such as the impact of a comet or asteroid.
- 4.3.1 Compare and contrasts the characteristics of stars, planets, moons, comets, and asteroids.
- 4.4.1 Demonstrates and models object/space/time relationships that explain phenomena such as the day, the month, the year, seasons, phases of the moon, eclipses and tides.