

Unit: Energy and Matter in Organisms - Grade 5

Content Area: **Science**
Course(s): **Science 5**
Time Period: **Marking Period 2**
Length: **30 days**
Status: **Published**

Resources

- HMH online textbook and resources
- Mystery Science
- Generation Genius

Established Goals/Standards

5-LS1-1	Support an argument that plants get the materials they need for growth chiefly from air and water.
5-LS1-1.LS1.C.1	Plants acquire their material for growth chiefly from air and water.
5-LS2-1	Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
5-LS2-1.2	Modeling in 3–5 builds on K–2 models and progresses to building and revising simple models and using models to represent events and design solutions.
5-LS2-1.2.1	Develop a model to describe phenomena.
5-LS2-1.LS2.A.1	The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as “decomposers.” Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.
5-PS2-1.2.1	Cause and effect relationships are routinely identified and used to explain change.
5-PS3-1.LS1.C.1	Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion.
5-PS3-1.PS3.D.1	The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water).

Essential Questions

- How does energy get transported by plants?
- How do organisms use energy and matter?
- How do organisms interact?

Enduring Understanding

- Develop and use models to explore how organisms interact and survive in environments where their needs are met.
- Understand that animals need food for the materials necessary for body growth and repair.
- Organisms obtain gases and water from the environment and release waste matter back into the environment.