

NGSS Support Guide

FOSS	Living Systems
	Grade 5 – Matter and Energy in Organisms and Ecosystems

IMPORTANT INFORMATION ABOUT CHANGES TO YOUR KIT!

We have added liter rulers for you to use in Investigation 3, Part 3: Respiratory Systems – to mark up the lung volume bags in the classroom (p. 180 in the Teacher Guide). You will also find instructions for how to do this included in your kit.

You will notice that Investigation 4, Parts 1-3: Sensory Systems - have been removed from the Teacher Guide and from the kit. The first three parts of this investigation have been moved to 4th grade as they are best aligned to 4th grade NGSS standards. Parts 4 and 5, however, do support students in connecting a systems approach in the 5th grade standards.

Learning Progression for this Kit

All living systems need matter and energy.

Animals acquire matter from food. Plants acquire matter chiefly from air and water.

Matter cycles and energy flows in food webs and food chains.

Common Student preconceptions to be aware of include:

- Plants are dependent on humans and cannot defend themselves against herbivores.
- Plants take in everything they need to grow – including energy – from the soil through their roots.
- Food webs are interpreted as simple food chains.
- Ecosystems are not a functioning whole, but simply a collection of organisms.

For More Information

If you have questions about this guide or its content, please direct your inquiry to your science materials center, or Regional Science Coordinator.