



Living Systems (Grades 4-6)

Natural systems interact in a variety of ways to maintain living systems. Students will discover how limiting factors affect a population, learn the importance of biodiversity and conduct observations to see how living and non-living things interact.

Grade 4 – Science Standards

1. The Nature of Science and Engineering

2. The Practice of Engineering

1. Engineers design, create, and develop structures, processes, and systems that are intended to improve society and may make humans more productive.

4.1.2.1.1 Describe the positive and negative impacts that the designed world

has on the natural world as more and more engineered products and services are created and used.

Grade 5 – Science Standards

4. Life Science

1. Structure and Function of Living Systems

1. Living things are diverse with many different characteristics that enable them to grow, reproduce and survive.

5.4.1.1.1 Describe how plant and animal structures and their functions provide an advantage for survival in a given natural system.

4. Life Science

2. Interdependence Among Living Systems

1. Natural systems have many components that interact to maintain the living system

5.4.2.1.1 Describe a natural system in Minnesota, such as a wetland, prairie, or garden, in terms of the relationships among its living and nonliving parts, as well as inputs and outputs.

5.4.2.1.2 Explain what would happen to a system such as a wetland, prairie or garden if one of its parts were changed.

4. Life Science

4. Human Interactions with Living Systems

1. Humans change environments in ways that can be either beneficial or harmful to themselves and other organisms.

5.4.4.1.1 Give examples of beneficial and harmful human interaction with natural systems.

Grade 6 – Science Standards

1. The Nature of Science and Engineering

3. Interactions Among Science, Technology, Engineering, Mathematics and Society

1. Designed and natural systems exist in the world. These systems consist of components that act within the system and interact with other systems.

6.1.3.1.1 Describe a system in terms of its subsystems and parts, as well as its inputs, processes and outputs.