

Sweetbriar Nature Center's Life Cycles

NYS Elementary Science Core Curriculum Alignment

Standard 4—The Living Environment

Key Idea 2: Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.

Performance Indicator 2.2 *Recognize that for humans and other living things there is genetic continuity between generations.*

2.2a Plants and animals closely resemble their parents and other individuals in their species.

Key Idea 4: The continuity of life is sustained through reproduction and development.

Performance Indicator 4.1 *Describe the major stages in the life cycles of selected plants and animals.*

4.1a Plants and animals have life cycles. These may include beginning of a life, development into an adult, reproduction as an adult, and eventually death.

4.1b Each kind of plant goes through its own stages of growth and development that may include seed, young plant, and mature plant.

4.1d Life cycles of some plants include changes from seed to mature plant.

4.1e Each generation of animals goes through changes in form from young to adult. This completed sequence of changes in form is called a life cycle. Some insects change from egg to larva to pupa to adult.

4.1f Each kind of animal goes through its own stages of growth and development during its life span.

Performance Indicator 4.2 *Describe evidence of growth, repair, and maintenance, such as nails, hair, and bone, and the healing of cuts and bruises.*

4.2a Growth is the process by which plants and animals increase in size.

4.2b Food supplies the energy and materials necessary for growth and repair.

Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.

Performance Indicator 5.2 *Describe some survival behaviors of common living specimens.*

5.2d Some animals, including humans, move from place to place to meet their needs.

5.2g The health, growth, and development of organisms are affected by environmental conditions such as the availability of food, air, water, space, shelter, heat, and sunlight.

Key Idea 6: Plants and animals depend on each other and their physical environment.

Performance Indicator 6.1 *Describe how plants and animals, including humans, depend upon each other and the nonliving environment.*

6.1d Decomposers are living things that play a vital role in recycling nutrients.

Standard 6—Interconnectedness: Common Themes

Key Idea 1: Systems Thinking *Through systems thinking, people can recognize the commonalities that exist among all systems and how parts of a system interrelate and combine to perform specific functions.*

- identify common things that can be considered to be systems (e.g., a plant, a transportation system, human beings)

Key Idea 2: Models Models are simplified representations of objects, structures, or systems, used in analysis, explanation, or design.

- discover that a model of something is different from the real thing but can be used to study the real thing