

THE LIFE OF A PLANT

Next Generation Science Standards

Standard: K-ESS3 Earth and Human Activity

- K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

Standard: 1-LS1 From Molecules to Organisms: Structures and Processes

- 1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

Standard: 1-LS3 Heredity: Inheritance and Variation of Traits

- 1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Standard: 2-LS2 Ecosystems: Interactions, Energy, and Dynamics

- 2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.

Standard: 2-LS4 Biological Evolution: Unity and Diversity

- 2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

Standard: 3-LS3 Heredity: Inheritance and Variation of Traits

- 3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.

Standard: 3-LS4 Biological Evolution: Unity and Diversity

- 3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

Standard: 4-LS1 From Molecules to Organisms: Structures and Processes

- 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Standard: 5-LS1 From Molecules to Organisms: Structures and Processes

- 5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.

Standard: 5-LS2 Ecosystems: Interactions, Energy, and Dynamics

- 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Standard: MS-LS1 From Molecules to Organisms: Structures and Processes

- MS-LS1-4. Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.
- MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
- MS-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.