

Brunswick School Department

Science

Grade 6: Classifying Life Forms

Unit Overview

This unit allows students to explore evidence of how environmental and genetic factors influence the growth of organisms. The emphasis is on how organisms reproduce, either sexually or asexually, and transfer their genetic information to their offspring. Also, students examine how animals engage in characteristic behaviors that increase the odds of reproduction and how plants reproduce in a variety of ways, sometimes depending on animal behavior and specialized features for reproduction. Examples of local environmental conditions could include availability of food, light, space, and water. Examples of genetic factors could include large breed cattle and species of grass affecting growth of organisms.

Essential Understandings

- Models can show how environmental and genetic factors influence the growth of organisms.
- Animals engage in characteristic behaviors that increase the odds of reproduction.
- Plants reproduce in a variety of ways, sometimes depending on animal behavior and specialized features for reproduction.
- Genetic factors as well as local conditions affect the growth of the adult plant.
- Physical characteristics reflect an organism's methods to find food and reproduce.

Priority Standards and Performance Indicators

(as based on Next Generation Science Standards)

P.S. S-4 Understand cause and effect

- b. Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment. (6th grade)
- c. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms. (6th grade)

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Examples of Formative / Summative Assessments

- “Changing Environment” and “Habitat Change” probe;
- Classification Quiz
- Labs
- Quizzes
- Exit tickets
- Create an new species of discovery project;
- “Adaptation” Assessment Probe;
- Classification Quiz

Sample Texts and Materials/Resources

- [ScienceSaurus](#) resource or other print resources similar to it
- Internet articles
- Interactive web sites for plant and animal interactions and habitats