# Educational Resources from Phenomenon Science Education

# Student Proficiency Goals for Performance Expectation 4-LS1-1



## **Information about Performance Expectation 4-LS1-1**

#### Performance Expectation 4-LS1-1.

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

#### Clarification Statement.

Examples of structures could include thorns, stems, roots, colored petals, heart, stomach, lung, brain, and skin.

#### **Assessment Limits.**

Assessment is limited to macroscopic structures within plant and animal systems.

### Science and Engineering Practice (Engaging in Argument from Evidence)

Construct an argument with evidence, data, and/or a model.

#### **Disciplinary Core Idea (LS1.A: Structure and Function)**

• Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.

#### **Crosscutting Concept (Systems and System Models)**

A system can be described in terms of its components and their interactions.

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# **Student Proficiency Goals for Performance Expectation 4-LS1-1**

#### **SEP (Engaging in Argument from Evidence):**

- Students describe evidence, data, and/or modeling results that show plants and animals have structures that support survival, growth, behavior, and/or reproduction.
- Students determine if and how well evidence, data, and/or model results support a claim, including the idea that plants and animals have structures that function to support survival, growth, behavior, and/or reproduction.
- Students construct a chain of reasoning, supported by evidence, data, and/or modeling results, that describes plants and animals as having structures that function to support survival, growth, behavior, and reproduction.

#### DCI (LS1.A Structure and Function):

- Students know that plants and animals have both internal and external structures.
- Students know that plants and animals have structures that serve specific functions.
- Students know that plants and animals have structures that serve various functions in growth.
- Students know that plants and animals have structures that serve various functions in survival.
  - Students know that plants and animals have structures that serve various functions in behavior.
- Students know that plants and animals have structures that serve various functions in reproduction.
- Students know that some structures serve functions in more than one system and with more than one outcome.

#### **CCC (Systems and System Models):**

- Students consider that plants and animals have structures that can be thought of collectively as systems.
- Students consider that plants and animals have structures that interact with each other as components of a system.
- Students consider that different systems
  within an organism can interact to support
  the function of each system and the survival,
  growth, behavior, and reproduction of the
  organism as a whole.