

# Aquatic Investigation- Spring Only

**90 minutes**

**3-5**

Students are introduced to macroinvertebrates and water ecology while enjoying beautiful Big Chico Creek. Join our Naturalists for a brief discussion before heading down to the creek for hands on learning. Students will use nets, hand lenses and ID charts to collect and identify macroinvertebrates, and determine what the presence of different species indicates for the health of the stream.

**\*\*Students will be walking in the creek and must have closed-toed shoes that can get wet. A towel and a change of clothes/ shoes is recommended.**

## Next Generation Science Standards 3-5

### Third Grade

#### **3-LS1 From Molecules to Organisms: Structures and Processes**

##### **Performance Expectations**

- 3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

##### **SEP**

- Developing and Using Models

##### **DCI**

- LS1.B: Growth and Development of Organisms

##### **CCC**

- Patterns

#### **3-LS4 Biological Evolution: Unity and Diversity**

##### **Performance Expectations**

- 3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, find mates, and reproducing.
- 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.
- 3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

##### **SEP**

- Analyzing and Interpreting Data
- Constructing Explanations and Designing Solutions

- Engaging in Argument from Evidence

**DCI**

- LS2.C: Ecosystem Dynamics, Functioning, and Resilience
- LS4.B: Natural Selection
- LS4.C: Adaptation
- LS4.D: Biodiversity and Humans

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**CCC**

- Cause and Effect
- Systems and System Models

## **Fourth Grade**

### **4-LS1 From Molecules to Organisms: Structures and Processes**

**Performance Expectations**

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

**SEP**

- Engaging in Argument from Evidence

**DCI**

- LS1.A: Structure and Function

**CCC**

- Systems and System Models

## **Fifth Grade**

### **5-LS2 Ecosystems: Interactions, Energy, and Dynamics**

**Performance Expectations**

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

**SEP**

- Developing and Using Models

**DCI**

- LS2.A: Interdependent Relationships in Ecosystems
- LS2.B: Cycles of Matter and Energy Transfer in Ecosystems

**CCC**

- Systems and System Models

### **5-ESS3 Earth and Human Activity**

**Performance Expectations**

- 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

**SEP**

- Obtaining, Evaluating, and Communicating Information

**DCI**

- ESS3.C: Human Impacts on Earth Systems

**CCC**

- Systems and System Models