

# Basic Needs of Living Things- Lesson Two

## 4<sup>th</sup> Grade

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### **Benchmark:**

4th Grade SLC 16: Demonstrate an understanding of the basic needs of living things.

### **Objectives:**

Students will identify the basic needs of organisms in nature, specifically those of plants and animals.

### **Materials:**

- Fish tank
- Water (river)
- Soil
- Grass
- Crickets
- Frog
- Science journals

### **Initial Demonstration:**

Show the students the fish tank, and explain that it can be used as a home by more than just fish. Explain the concept of a terrarium as a home for land animals, just like an aquarium is a home for water animals, like fish, or snails. What things does a fish need in an aquarium to survive?

### **Target Observations:**

- Fish need fresh water in their aquarium so they can “breathe” and not dry out
- They need food, like fish flakes or plants
- Fish also like a place to hide out if they get scared

### **Target Model:**

- Fish are animals, so they have basic needs of food, shelter, water, and gases (there is oxygen in the water that the fish breathe)

### **Procedure:**

The students will be asked to draw a terrarium in their journals, and make a list of items they would need to maintain a habitat for frogs. Demonstrate the materials brought in for the lesson, and ask the students what use each one might have in the terrarium:

- soil to give the plants stability (but not as a basic need)
- crickets as a source of food for the frogs
- plants to provide oxygen; they also can provide food and shelter for the crickets
- water to hydrate the plants and frogs, also water is typical frog habitat (shelter)
- frogs to complete the terrarium

The demonstrator will ask volunteers to add each of the items to the terrarium as they are identified.

### **Target Revised Model:**

In order to survive:

- Different organisms need different types of shelter
- Different organisms need different types of food
- All organisms need water
- All organisms need oxygen (animals) or carbon dioxide (plants) to breathe

### **Summary:**

The terrarium has three different types of living things in it- grass, crickets, and the frog. The grass breathes carbon dioxide, makes it food from sunlight, and gets both water and shelter from the soil. The crickets eat the plants for food, drink water, use the grass as shelter, and breathe oxygen. The frog eats the crickets for food, drinks water, uses the water as shelter, and breathes oxygen.