



## earlySTEM™ My First Specimen Viewers - Set 4

### Here's What You Get!

4 Viewers with embedded specimens:

- European Peacock Butterfly
- Rice
- Centipede
- Forget-Me-Not & White Lace

Teacher's Activity Guide

### Introduction

Young children are naturally curious about nature! Excellerations® Toddler Specimen Viewers let them get close-up views of plants and animals just like real scientists, and the specially designed handles are the perfect size and shape for curious little hands! As children examine the specimens, they develop key process skills such as observing, comparing, contrasting and communicating as well as an awareness of and appreciation for the natural world. Use the activities suggested below to further children's exploration by engaging them in spirited discussion and introducing scientific terminology as appropriate for their level.

### Use the Excellerations® Toddler Specimen Viewers to address these Head Start Early Childhood Learning Outcomes:

- Goal P-ATL 11: Child shows interest in and curiosity about the world around them
- Goal P-SCI 1: Child observes and describes observable phenomena (objects, materials, organisms and events)
- Goal P-SCI 2: Child engages in scientific talk

### Suggested Activities

#### Plant or Animal?

Encourage the children to observe the specimens. Can they tell which are plants and which are animals? Encourage them to observe the specimens more closely. How are the plant specimens the same? What makes them different from the animals? They may note that the plants have stems or leaves, the animals have legs or wings and antennae. Can they identify other kinds of plants and animals? Some children may be interested to know that plants make their own food from sunlight and water, but animals must hunt for or find their food.

#### What Colors Do You See?

Encourage the children to identify the colors they see in the different specimens. Observe other plants and animals and discuss the different colors. Are all plants the same color? Some children may note that many plants have green leaves. The color is from chlorophyll, a chemical in the plant that makes food. Challenge the children to find evidence of chlorophyll in different plants.

Are all animals the same color? Children may note that some animals are dark colors, like brown or gray, that help them camouflage, or blend in with their surroundings for protection. Some animals have bright colors. Sometimes an animal's bright colors mean

## Toddler Specimen Viewers (continued)

“Here I am—look at me!” and sometimes bright colors mean “Stay away—I’m dangerous!” Encourage the children to look for examples of animals with camouflaging colors and colors that draw attention.

### How Many Do You See?

Together, count the specimens in each viewer. Can you find 1 butterfly, 3 rice leaves, 2 flowers and 1 centipede?

Plants have different kinds of leaves. Some have single leaves – one leaf on a slender stem. Some have compound leaves: many small leaflets on one stem. Take a close look at other plant leaves. What do you see? How are the rice leaves different? Do you like rice, does rice look like the leaves on the same plant?

Can you count the flower petals? Petals protect parts of the plants and can be many sizes. Petals are often beautiful colors that attract insects. Look for petals on other flowers.

### Insects & Centipedes!

The butterfly is an insect. Insects have 6 legs. Many insects have 2 pairs of wings. Can you find these parts on the butterfly? Centipedes have many legs – can you think of other animals with many legs?

Look for pictures of other insects and centipedes and find the body parts. If possible, observe these animals on walks, in books, or in videos. Prompt the children to discuss how they are the same and how they are different. What colors are the different insects? How do they move? How do they eat? Can you pretend to be a butterfly or centipede?

### Interesting Specimen Facts

The European Peacock Butterfly is a very colorful butterfly with spots on its wings that look like big eyes to other animals. Like all butterflies, it grows from an egg into a caterpillar. Then it makes a chrysalis, or cocoon, where it lives while its body changes into a beautiful butterfly.

Red Headed Centipedes can have more than 30 legs and grow up to 8 inches long. They are bigger than a lot of insects and spiders.

Forget-Me-Not and White Lace flowers are plants with small flowers – can you find the flowers in these specimens?