



earlySTEM™ My First Specimen Viewers

Here's What You Get!

4 Viewers with embedded specimens:

- Garland Chrysanthemum (Chrysanthemum coronarium)
- Garden Lobelia (Lobelia erinus)
- Pride-of-Texas (Phlox drummondii)
- Spotted Red Bugs (Parastrachia japonensis)
- Common Tiger Butterfly (Danaus genutia)
- Peanut Leaf (Arachis hypogaea)

Teacher's Activity Guide

Introduction

Young children are naturally curious about nature! Excellerations® Toddler Specimen Viewers allow them to get close-up views of plants and animals just like real scientists. 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 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. Leaves come in many different shapes and sizes. Some leaves change colors throughout the year.

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



Toddler Specimen Viewers (continued)

bright color means “Here I am—look at me!” and sometimes bright colors mean “Stay away—I’m dangerous!” Ask 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, 2 bugs, 3 flowers and 4 leaflets?

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?

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!

The butterfly and the Spotted Red Bugs are insects. Insects have 6 legs. Many insects have 2 pairs of wings. Can you find these parts on the butterfly and Spotted Red Bugs? Look for pictures of other insects and find the body parts. If possible, observe insects on walks, in books, or in videos. Prompt the children to discuss how the insects 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 bug?

Interesting Specimen Facts

The flowers in this specimen set come in many colors. The Chrysanthemum flower is also called a mum. These flowers are found in many countries and people use them for festivals, decorations and even cooking.

The Spotted Red Bugs are members of a group of insects called Shield Bugs. Their bodies have a tough covering. How does the Shield Bug’s covering protect its body?

The Common Tiger Butterfly looks very similar to the Monarch Butterfly. 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.

Each peanut plant leaf has four small leaflets that grow in opposite pairs. Peanut leaves are part of a plant that grows peanuts. Do you like peanuts? What have you eaten that is made with peanuts?