## **Nature Patterns**

Repeated designs are all around us



Ages: 6+

Time: 1 hour

Repeated designs are called patterns. Today you will see many patterns in Lake Wilderness Arboretum.

## Here's How:

1. Below are photos of natural objects in the Arboretum. Look for the repeated design in each object. The repeated design is a pattern.









- **2.** As you walk around the gardens in the Arboretum, and observe carefully, you will **see more and more patterns**.
  - Perhaps you notice the scales of a seed cone or blades of grass these repeated designs are patterns!
  - What other patterns do you see?
- 3. You can create art showing the pattern you see.
  - Find a natural object with a repeated design (pattern) that interests you.
  - > Identify the repeated design.
  - > Sketch the object large enough to fill your paper.
  - > Outline the repeated designs using a marker.
  - ➤ **Use crayons to color the repeated designs** in your sketch. You can use wild colors and mix them up to create more interest!





## The Back Story:

We see many repeated designs (patterns) in the natural world around us. For example, petals of flowers, hexagon shapes in beehives, stripes on zebras, and spots on leopards are patterns.

When children see and make patterns it encourages mathematical thinking, including counting, problem-solving, and drawing inferences about number combinations. Pattern-making is a pre-algebraic activity.

Patterns create a sense of rhythm or movement, familiarity, order, texture, and interest. We feel comfortable when we see patterns.

Philosophers and scientists have studied patterns in nature for more than 2,000 years. They believe that patterns show there is order in nature, and they have found that many patterns may be described using math.