### I'M A TREE: LESSON 1

## **LEAF GAMES**

SUBJECT: Math, Language Arts, Science SKILLS: Identifying and Sorting by Attributes, Counting

### **MATERIALS**

Computer/tablet/phone

• FLIPGRID Challenge: The Leaf Sorting Game

Discovery Kit Materials: Nature Journal, Marker, Tape

# COMMON CORE STATE STANDARDS (CCSS)

#### **MATHEMATICS**

- **K.CC.4** Understand the relationship between numbers and quantities; connect counting to cardinality using a variety of objects including pennies.
  - **a**. When counting objects, establish a one-to-one relationship bysaying the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
  - **b**. Understand that the last number name said tells the number of objects counted and that the number of objects is the sameregardless of their arrangement or the order in which they were counted.
  - c. Understand that each successive number name refers to aquantity that is one larger.
- **K.CC.5** Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 0-20, count out that many objects.
- **K.CC.6** Orally identify (without using inequality symbols) whether the number of objects in one group is greater/more than, less/fewer than, or the same as the number of objects in another group, not to exceed 10 objects in each group.
- **K.MD.1** Identify and describe measurable attributes (length, weight, and height) of a single object using vocabulary terms such as long/short, heavy/light, or tall/short.
- **K.MD.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of" or "less of" the attribute, and describe the difference.

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### **ENGLISH LANGUAGE ARTS**

- **K.L.5a** Sort common objects into categories to gain a sense of the concepts the categories represent.
- **K.L.6** Use words and phrases aquired through conversations, reading and being read to, and responding to texts.
- **K.SL.5** Add drawings or other visual displays to descriptions as desired to provide additional detail.

### **SCIENCE (OHIO LEARNING STANDARDS)**

- **K.PS.1** Objects and materials can be sorted and described by their properties.
- **K.LS.1** Living things have specific characteristics and traits.
- **K.LS.2** Living things have physical traits and behaviors, which influence their survival.

### **ESSENTIAL QUESTIONS**

- 1. How can I group things together?
- 2. What words can I use to describe trees?
- 3. Why are there so many trees?

### I CAN STATEMENTS (LEARNING OBJECTIVES)

- 1. I can describe measureable attributes of objects.
- 2. I can sort common objects into categories.
- 3. I can count objects, and identify the total number counted.

### **LINKS**

- Slug Science Journeys Homepage https://www.miamicountyparks.com/node/1256
- I'm a Tree Video https://vimeo.com/videobranch/review/415298468/7965049766

### ACTIVITY

### **LEAF GAMES**

The students should find 5 different leaves. Have them study the shape, size, texture and color and then cover the leaves with a cloth. Student should then go and try to find the same types of leaves and compare them with the leaves under the cloth. Students can also use these leaves to complete the math challenges.

### **LEAF TATTOO**

Students should find a leaf with large veins like Solar Steve shows in the video. Have them press the leaf vein side down on their skin, for 30 seconds.

#### **MATH CHALLENGES**

Students will complete the **FLIPGRID Challenge: The Leaf Sorting Game** and video their answers to the following by showing their leaves:

### **SORTING AND COUNTING LEAVES**

Sort leaves by shapes and count each group of leaves. Which group has the most leaves? Which group has the least amount of leaves? How do your leaves measure up? Line up all of the leaves in a row and pick out one that is the longest and one that is the shortest.

Students are encouraged to use their Nature Journals to detail about what they discover:

- Draw or trace around their favorite shaped leaf. Students should describe their leaf's shape and paste it in their journal.
- Paste the longest and shortest leaf in their journal.
- Draw or trace around the shape of the leaf that had the most in its group and record how many.
- Draw or trace around the shape of the leaf that had the least amount in its group and record how many.

#### **EVIDENCE OF ACTIVITY**

Students will complete this assignment in their nature journal, and create the **FLIPGRID Challenge: The Leaf Sorting Game.**