# K-2 Online Curriculum Activities

# **Cross-Curricular Math Extension**

## **Living Things Extension**

First and Second Grade Math Extension by SCA Master teacher, Christie Kittrell, Rivelon Elementary

SCA Theme: Habitats

**Focus Question** How can we tell if living and non-living things are symmetrical?

#### **Activity Synopsis**

In this lesson we will define what makes an object symmetrical. This extension of the "Living Things" activity will determine whether the things classified are symmetrical or not.

#### **Time Frame**

1 day

#### **Objective** The learner will be able

The learner will be able to:

• Identify and create figures, symmetric along a line, using various concrete models

## Standards

Math - K.G.4, 1.G.1, 2.G.1

Science - 1.1.1, 1.1.3, 2.1.1, 2.1.4

ELA – Reading Informational – K.9, 1.9, 2.9

## Materials

- Items from previous activity, for example:
  - Living insects, plants
  - Non-living pencil, paper
- Symmetry data sheet to list the results (link)
- paper
- pencils
- scissors
- examples of symmetrical and nonsymmetrical items such as:
  - Symmetrical butterfly
  - Nonsymmetrical shoe
- paper cut-outs of shapes (circle, parallelogram)
- paper with capital letters (A, H, O, R, Z, N)

South Carolina

Aquarium

paper cut-outs of animals or animal toys (optional)

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#### Procedure

- 1. Provide each student with a paper circle to fold in half. Ask students if the two halves are the same. (Answer: yes)
- 2. Provide each student with a parallelogram to fold in half and ask the same question. (Answer: no)
- 3. Discuss with the students the differences between the two shapes and introduce the concept of symmetry.
- 4. Ask students to think about which capital letters of the alphabet are symmetrical and which are not.
  - i. Symmetrical A, H, O
  - ii. Nonsymmetrical R, Z, N
- 5. Ask students to work in groups to determine if the non-living and living objects are symmetrical. You can even use the same objects that you used in the Living Things Activity.
- 6. Discuss the results as a class and record class results on a paper chart.

## Assessment

Provide students with pictures, cut-outs, or real objects (five total). Ask students to determine whether each item is symmetrical or not. Students receive one point for each item that is classified correctly (five total). Note: It helps students if they draw the line of symmetry.

