Birds and Worms (adapted from Project Learning Tree)

LEARN ABOUT ADAPTATIONS AND VARIATIONS THAT HELP ANIMALS SURVIVE

First Grade NGSS DCI Addressed:

**LS1.A** Structure and Function
- 1-LS1-1

**LS3.A** Inheritance of Traits

**LS3.B** Variation of Traits
- 1-LS3-1

Pre-Trip Information:
- Camouflage: Animal Hide and Seek Video

Objective: Students discover the value of camouflage as protective coloration.

Materials: *bag of “worms” (100 worm sized pieces of yarn, approximately 10 of each color)*
*Poster paper with the names of each color of worm.*

Set Up: * Pick a start area and spread the “worms” out approx. 20 feet away.

Facilitating the Activity: Set the stage – introductory questions:
- Ask: Why are frogs green, owls brown, and polar bears white? *To camouflage*
- Ask: What are the benefits of camouflage? *To blend in to the habitat to hide better or hunt better.*
- Ask: What are the best colors for an animal to be out here at River Camp to camouflage? Brown or Green.
- Tell the kids... Lets find out!

Doing the Activity
- Split the students up into two groups and have them form two single file lines.
- Tell them they are all Western Scrub Jay’s that live here at the San Joaquin River.
- Tell them that there are lots of “worms” spread out in the grass in front of them. Show them one.
- Explain the relay race activity to them:
  - The first scrub jay eats (picks up) one “worm” and runs back to tag the next person in line.
  - After tagging the next person in line, the player should go to the back of the line, still holding onto their worm(s).
  - Once the player at the front of the line is tagged they run out to grab a worm, then come back to tag the next player.
  - The first group to have all scrub jays get a worm (to finish the relay race) wins this round.
- After the first round have each player drop their worm in the appropriate colored area on the poster paper.
- Ask: What do you notice about the colors that were chosen?
- Play a second round. This time have them pick up 2 worms. After the round have them drop their worm in the appropriate colored area on the poster paper.
- Ask again: What do you notice about the colors that were chosen?
- Play again. Mix it up and have them grab 3 worms or have each person go twice. Be creative!
- After the round have them drop their worms on the poster paper again.
- Ask: What colors do we have the most of? The least of?
- Leave those worms on the poster paper and take the kids out into the grass to search for the rest.

**Activity Debrief**

a) Ask: Which color(s) were the best camouflaged to survive in the grass environment? *Brown and Green*

b) Ask: Why were they the best suited? *Because they blended in.*

c) Ask: What color(s) would be the best suited if we did this on the road? *Lighter colors. If you have the time try it on the road.*

d) Ask: What did you learn from this activity – give a couple of students a chance to answer.

Post Trip Activities to be done in classroom:

- Print out various animal shapes and have students choose one to color, then have them use art & craft supplies to create a home for them that they will blend in to so that it is hard to see the animal they colored.