

**Project FOCUS
Best Lessons
FIRST GRADE**

Title of Lesson: Animal Adaptations- Camouflage

Theme: Life Science

Unit Number: 6 **Unit Title:** Animal Planet

Performance Standard(s) Covered (enter code):

S1CS4

S1L1

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Animal survival techniques, camouflage, problem solving

Learning Activity (Description in Steps)

Abstract(limit 100 characters): This experiment will help students understand how camouflage enhances survival.

Details: Before diving into the experiment, show the children the examples of camouflaged animals. Have them brainstorm and ask them questions concerning the animal's fitness in their environment. Have the kids compare and contrast the animals by examining their color, patterns, textures, and other differences. Do not tell them all the answers quite yet, let them think. On the board, write down some of their ideas. Next, tell the children they are birds and its dinnertime! Divide the class in two groups. Have the first group line up in front of the green "leaves." Turn off the lights, and have the first kid in line put on a pair of sunglasses. Quickly each child will take a toothpick (worms) and pass the sunglasses to the next person in line. After all the students in the first group pick one toothpick from the green pile record with the class how many students picked green toothpicks verse how many students picked yellow toothpicks. Do the not examine the first group results. Next, have the second group line up in front of the yellow pile and quickly pick a toothpick wearing sunglasses. Do the same procedure. Make sure the student pick quickly, do not give them time to really think about what they see. Finally, help the students record the results for the second part of the experiment. In

theory, students who picked from the green pile should have picked yellow toothpicks and those who picked from the yellow pile should have picked green toothpicks. They should pick the first toothpick they see. Record the results on the board. You can also give the students a results chart so they can also record on their own. Now discuss the results with the kids. Help them draw conclusions by using their results. If the experiment does not work, discuss possible problems in the experiment. If you make sure they pick swiftly, with the lights off and sunglasses on, it will work. It is better to do one line at a time to avoid confusion.

Materials Needed (Type and Quantity):

4 pieces of construction paper (2 green and 2 yellow)

1 pair of sunglasses (small enough for kids to wear)

30 red toothpicks

30 green toothpicks

Tape

Pictures of camouflaged animals

Notes and Tips (suggested changes, alternative methods, cautions):

Before class, surf the Internet or look through magazines and find about 8 different examples of animals in camouflage (i.e. a green frog in green grass). A butterfly with an eye-like design on its wing is a great unique example. The eye-like design on a butterfly's wing tricks predators, making them think the animal they see is much larger than a butterfly. Once in the classroom, tape one sheet of yellow construction paper to one flat surface, and one sheet of green to another flat surface. Next, tear the other two sheets of construction paper into quarter size pieces. To go a step further, cut out green and yellow leaf shapes instead of torn pieces. Next, put green leaves on the green sheet of paper and yellow leaves on the yellow sheet of paper. Then, put an even number of yellow and green toothpicks on each sheet of paper. NOTE: It is best to use wooden toothpicks because they best match the color of the construction paper. Also, put the experiment in a place where the kids are not sitting around so they are not able to mess with it or even see it well.

Make sure the students do not put the toothpicks in their mouths. After one group picks from a pile, record the results and immediately collect the toothpicks. Tell the class ahead of time not to break or put the toothpicks in their mouths.

Sources/References:

- 1)
- 2)
- 3)