



Camo Caterpillars

Materials:

One package of colored pasta pieces (tan, orange, green), three clear cups or containers (one for each color), and a grassy area in the schoolyard for the game

Objectives:

Students will be able to:

- Identify the stages in complete metamorphosis – egg → larva → pupa → adult
- Identify defense mechanisms caterpillars use to ward off predators
- Describe how the use of camouflage increases a caterpillars chances for survival

Background:

Butterflies and moths as well as other insect orders undergo complete metamorphosis during their life cycle. An adult butterfly or moth lays an egg that hatches into a worm-like caterpillar. The caterpillar eventually becomes a pupa and emerges as an adult.

Caterpillars have several means for protecting themselves. Some are colored to blend in with their environment, while others may look like bird droppings. Caterpillars may also have horns or spikes to make them appear dangerous or eyespots to trick predators and keep them from being eaten. You may want to make flashcards using pictures of caterpillars to illustrate the various defense mechanisms they use.

Challenge:

1 - Divide the students into two to four teams and have them line up single-file along a starting line.

2 – Instruct students that they are birds in search of juicy caterpillars. Show them one of the caterpillars (pasta pieces) and tell them that their job is to search the habitat (game area) for a caterpillar. Once they find a caterpillar (any color), they will need to run back to the group and tag the next person. When the race is over, have the students place their caterpillars into the correct cups and compare the number of each color that was found. Dump the found caterpillars into a larger container – do not throw them back into the game area.

3 – For the second round, inform students that they will be looking for the most nutritious caterpillars, which are the green ones. They must find 1 green caterpillar or they may find two orange or three tan ones before they can return to the line and tag the next person. When the race is over, have the students place their caterpillars into the correct cups and compare the number of each color that was found. Dump the found caterpillars into a larger container – do not throw them back into the game area.

4 – For the third and final round, inform students that tan and orange caterpillars have begun eating a plant that makes them distasteful and any bird that eats them gets sick. The students are only allowed to “eat” green caterpillars for this round and must find one before they can return to the line to tag the next person.

5 – Ask the students to predict the number of caterpillars (each color) that are left in the game area. Allow time for the teams to search the game area for leftover caterpillars of any color. Have the students place their caterpillars into the correct cups and compare the number of each color that was found. Discuss the results with the students and compare to their predictions.

6 – Determine the winner of the challenge (team that won the most rounds) and award prizes to the members of that team.