Toothpick Prey
Teacher's Guide

==========

The Initial View (Introducing the Activity)

The area you choose to do this activity should be grassy, but not really tall grass unless you want to add this factor into your toothpick prey's "habitat" or home. The area you choose is up to you, but an area 10 meters by 10 meters works well. Mark the four corners of the "habitat". Scatter the toothpicks only in this area. Photocopy enough sheets of the handout prior to class. You can also modify the rules and the number of toothpicks you use for the activity. A good starting number is to have 20 total toothpicks for each student. Colors suggested (You can use more colors!) are; Red, Green, Yellow, Blue, and natural Brown. *You can use any combination you want, but you must use Green and Red in your combinations. Have the same number of each color toothpicks!* Scatter the toothpicks randomly before the kids start. No barefoot science, remember the toothpicks are sharp!

Take a Deeper View! (More Science)

Many **Prey** animals are **Camouflaged** by looking like their **Habitat** or home. This is called **Protective Coloration**. Your kids spotted the bright red toothpicks pretty quickly thanks to their bright colors. The green ones survived the longest, thanks to how well they blended in! Other animals will imitate dangerous animals or their surroundings. Moths have huge "eye spots" on their wings to look like a bird, Walking Stick insects look like a small branch, Bull Snakes coil up like a rattlesnake and strike, even though they're not poisonous, and a Scarlet Snake is brightly colored like a dangerously **Venomous** Coral Snake. All of these are examples of **Mimicry**. **Prey Species**, or kinds of animals, survive by **Reproducing** in huge numbers. This increases the chance somebody will live to carry on their kind!!

More and Bigger Views! (Additional Classroom Ideas)

1. Find out just how huge is the ability of prey animals to reproduce. Have the kids write what they think an area would be like if there were no **Predators**.
2. How are predators equipped to increase their chances of catching prey? (teeth, etc.)
3. Compare the **Field of Vision** and **Stereo Vision** of predator animals and prey animals. Prey have a bigger field of vision and predators have better stereo vision. Find out why this so logical!! (The larger field of vision warns of a predator coming, stereo vision helps to locate and catch prey better.) What type of vision is like ours? (stereo) Are we predators?
4. Research how fishing and hunting licenses and special taxes on people who hunt and fish help preserve habitat for even those who don't fish and hunt!!!
5. Learn more about how the Department of Natural Resources in your state controls and protects fish and wildlife by controlling hunting and fishing seasons and habitats.
6. Make a bulletin board of different kinds of mimicry in living things.
7. Make a bulletin board of examples of camouflage in both predators and prey animals.
8. Contact a local hunter; have them bring camouflage clothing for demonstration.
9. Jump on the web and research various wildlife conservation groups.
10. Another form of protective coloration is called **Countershading**. Some animals are different colors on the top and bottom of their bodies. This makes it tough for a **Predator** above them to spot them looking down against the ground or looking up. Find some examples.

Answers

1. (red, or other bright colors; easy to see!) 2. (green, hard to see!)