

4th Grade Activity: Predator vs Prey

*Predators and prey animals have different structures and behaviors that help them survive in the wild.
(NGSS Disciplinary Core Ideas 4-LS1.A: Structure and Function; 4-LS1.D: Information Processing)*

Pre-Activity Questions

- What is a predator? What is a prey animal?
- What is the difference between physical and behavioral adaptations?

Survivor: Predator vs Prey Activity

Animals have different internal structures that help them survive. For example, some predators have large sharp canine teeth for ripping and shredding meat, while most prey animals have flat teeth for grinding up plant material.

Animals also have different external structures that help them survive. Predators have a great sense of sight for hunting, while prey animals have a great sense of hearing for detecting predators. Prey animals, like Zebras, have their eyes on the side of their head for detecting predators, as well as satellite ears that rotate to be able to hear predators all around them. Camouflage can also help prey animals hide from predators by helping them blend in with the environment, making it difficult for predators to find them.

Animal behaviors change based upon whether they are prey or predators. There's a saying, "Eyes on the side like to hide, eyes on the front like to hunt." Prey animals have become great at camouflaging and hiding, while predators have become great at stalking and hunting.

Let's try being predators!

Hide my Hide Activity

Materials

- Laundry Basket or Box
- Red, Green, Yellow, Orange Construction Paper
- M&M's – Red, Orange, Yellow Green (or colored plastic beads instead)
- Stop Watch
- Recording Sheet
- Pencils
- Cups

Instructions

1. Line the bottom of the basket with 1 sheet of each color of paper.
2. Rip up more paper into strips and loosely crumble up the strips in the basket, making sure the colors get mixed up.



Step 1



Step 2

3. Which color of M&M's do you think is going to be the easiest to find and why?
4. Spread the M&M's into the basket and give it a little shake - don't shake too hard, or all the M&M's will go to the bottom.
5. You are predators and are going to hunt the prey (M&M's). The prey is trying to camouflage and hide in the habitat.
6. Using the timer, see how many M&M's you can find in 30 seconds.
7. ACount the number of each colored M&M's found and record it on the recording sheet.
8. Optional: Repeat with the lights on and then with the lights off.
 - a. Our eyes are able adapt and adjust to the changes in light.

NOTE: For multiple people, have each take turns finding the M&M's while the other person times.

Post-Discussion Questions and Resources

- How accurate were your predictions about which color would be easiest to find?
- What colored M&M's were the easiest to find and why?
- Were you able to find all the M&M's in the basket? Why or why not?
- Was it easier to find the M&M's in the light or dark, and why?
- Spend some time with our [Oakland Zoo Animals via webcam](#). Which are predators/ prey?
- For more information on predators, check out these videos:
 - Video: [Opposable Thumbs](#)
 - Video: [NatGeo - Weird Animal Adaptations Playlist](#)