



Campbell Creek Science Center

Eye Spy: Animal Eyes

Animal eyes come in many shapes, sizes, and quantities. The specialized eyes of different animals provide unique advantages. Discover how animals see things differently than you and go on a scavenger hunt to find different eye types in the wild!

Directions

1. Head outside to look for different eye types on the wildlife you encounter.
2. Write down or draw each animal you find and match it to its eye type on the following pages. Use the information on the next pages to learn about different animal eye types and the benefits of each one.

Remember. Be wildlife aware. Give animals their space and treat them with respect.

Materials

- Pencil or pen
- Hand lens or magnifying glass (optional)

Questions

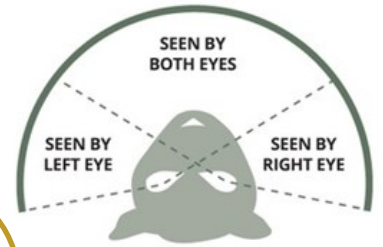
- What hypotheses can you make about the animals you observe based on the location and structure of their eyes?
- How does eye type help animals survive?
- What did you learn about your own vision during this activity?





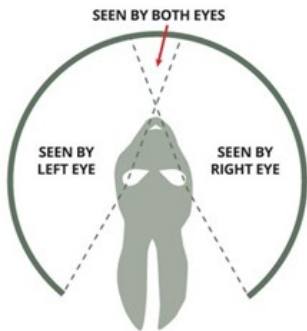
Eye Spy animals with...

Eyes on the Front of the Head: These eyes provide a large overlap in the field vision between the two eyes. This allows for great depth perception. Predators often have this eye-type.



Draw or Describe your Animal:

Why do you think predators would want to have good depth perception?



Eyes on the Side of the Skull: Eyes located on the side of an animal's head provide a wider field of vision. This larger field of vision helps them spot predators that are sneaking up on them.

Draw or Describe your Animal:

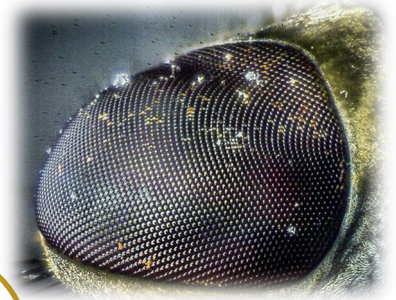
How would your life be different if you could look behind you without turning your head?





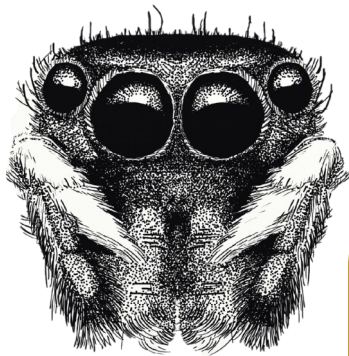
Eye Spy animals with...

Compound Eyes: Compound eyes have many smaller lenses that form a picture, similar to how pixels make an image on a computer screen. These eyes provide a wide field of view and are great at sensing quick movements.



Draw or Describe your Animal:

Imagine what the world would look like if everything you saw was made up of a bunch of colorful dots. What would be harder to do? What would be easier to do?



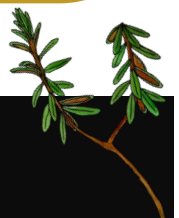
More than two eyes: Animals with multiple eyes often have two large eyes that can sense images and shapes and several eyes on the sides and back of their heads that are used to sense movement and light.

Draw or Describe your Animal:

What would it be like to look out of four eyes at the same time: two eyes pointing forward and two eyes pointing backwards?



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Eye Spy animals with...

Eyestalks: Some animals have eyes located at the ends of stalks, which give them a wider field of vision. Some eyestalks can bend in all directions, which allow them to see all around without turning their body. Eyestalks also allow them to see above their bodies where predators may try to catch them.



Draw or Describe your Animal:

Imagine you had eyestalks on the top of your head that could bend. What new things would you be able to see around you?



Fake Eyes: Some animals — including some insects, cats, reptiles, and fish — have fake eye-like spots to help protect them by either looking like another animal or by confusing the predator. Some animals also use their fake eye spots to help communicate with members of their own species.

Draw or Describe your Animal:

If you had fake eyes on your body, where would you want them? How would you use them?



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