



Nighttime Color Challenge



Our eyes are very complex ! They have evolved to have two cells in them, rods and cones, which each serve different functions. Rods adjust to the amount of light available to us, and are important for our night vision. Cones are used for seeing all the beautiful colors in the world. Unfortunately cones don't function well in low light, which means it is hard to see color at night.

For this challenge, perhaps with a partner, take a bunch of crayons, or color pencils, or any thing with different colors, and bring them outside at night. Make sure there is little to no light (Moonlight is sufficient). Have your partner show you a crayon in the dark while covering the name of the color. Can you guess the color ? How good is your night vision ? Maybe try a few different colors and see who gets the most correct.



Animals at Night

Certain animals have evolved to be able to see better at night. They have lots of rod cells and large eyes to let in as much light as possible. For example, some owls have eyes that are larger than humans. If we had the same sized eyes relative to body size our eyes would be the size of oranges.

Other species like cats have evolved to reflect light around their eyes to maximize the amount of light they absorb. This is why their eyes glow.