

YouTube Video Worksheet - How We See Colors

The Biology of Color

As organisms we perceive different wavelengths of light as colours using cone cells on the retina. Some of these respond to red light, others to green and others to blue. The resulting signal travels along the optic nerve to the visual cortex of the brain, which translates the signal into a color.

Watch the short TedEd talk "How we see color"

https://www.youtube.com/watch?v=18_fZPHasdo and answer the questions that follow.

Questions

1. How is the color of an object related to the frequency of light it reflects?

2. What color is high frequency visible light?

3. What is the layer of cells on the back of the eyeball that detect light called?

4. Is it possible for your brain to tell the difference between true yellow light and a mixture of red and green light? Explain your answer.

5. Why is the RGB property of human vision useful in televisions?