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Visible Light and How it Works

Visible light is the part of light that we can see with our eyes. It's what makes the world colorful and bright! Light travels from the Sun and other sources, like light bulbs, to help us see everything around us. Let's explore how visible light works and why it's so important.

Light is a type of energy that travels in waves. Visible light is the part of light that humans can see. It's made up of seven colors: red, orange, yellow, green, blue, indigo, and violet. Together, these colors form white light, like sunlight.

Light moves in straight lines and travels very fast—about 186,000 miles per second! It can move through air, water, and even empty space. When light hits an object, it can:

- **Reflect** (bounce off, like when you see your reflection in a mirror).
- **Refract** (bend, like when a straw looks bent in a glass of water).
- **Absorb** (be taken in, like when a black shirt gets warm in the Sun).

The colors we see depend on how light interacts with objects. For example:

- A red apple looks red because it reflects red light and absorbs the other colors.
- A white object reflects all the colors of light, making it look white.
- A black object absorbs all the colors, so no light bounces back to our eyes.

Visible light comes from different sources, like:

- The Sun, which is the main source of natural light on Earth.
- Light bulbs, which create artificial light indoors.
- Fire and other glowing objects, like candles or lava.

Fun Facts About Light

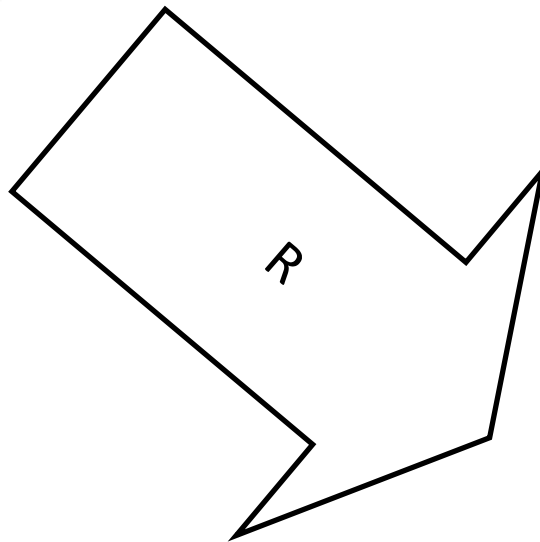
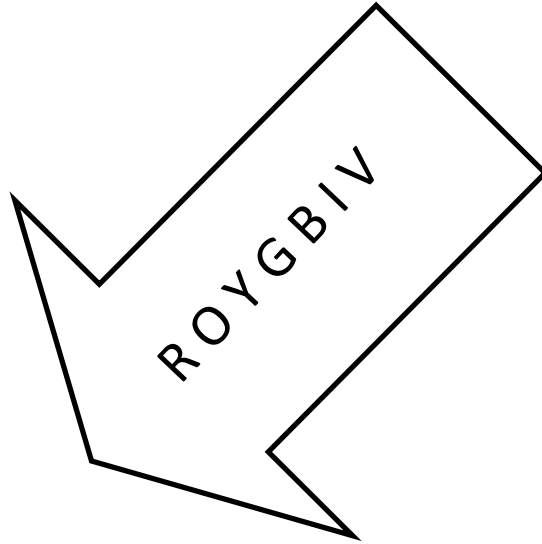
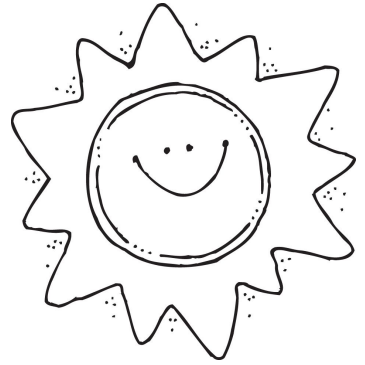
A rainbow shows all the colors of visible light when sunlight passes through raindrops and bends (refracts).

Different colors of light have different wavelengths. Red light has the longest wavelength, while violet has the shortest.

Some animals, like bees, can see types of light that humans can't, such as ultraviolet light!



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Color the apple to show that orange, yellow, green, blue, indigo, and violet light waves were absorbed.

The red light wave was reflected to the girl's eyes.