

# Color and Light

## CONTENTS

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### Think About . . .



What Is Light? . . . . .	2
Reflection of Light . . . . .	4
Absorption of Light . . . . .	4
Refraction of Light . . . . .	5
What Happens When Light Hits Different Materials? . . . . .	7
Electromagnetic Spectrum . . . . .	8
How Do We See Objects? . . . . .	10
How Do We See Colors? . . . . .	11
What Are the Primary Colors of Light? . . . . .	13

### People in Science

Annie Jump Cannon, Astronomer . . . . .	14
---	----

### Did You Know?

About Color Blindness . . . . .	15
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<b>Glossary</b> . . . . .	16
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## Glossary

**absorb** to take in

**color filter** substance that allows only certain colors of light to pass through it

**concave lens** lens that is thinner in the center and thicker at the edges

**convex lens** lens that is thicker in the center and thinner at the edges

**cornea** clear covering over the iris and the pupil in the eye

**electromagnetic spectrum** all the types of electromagnetic waves, listed in order of wavelength

**electromagnetic wave** wave made of vibrating electric and magnetic fields; part of the electromagnetic spectrum

**energy** ability to cause change

**focal point** point at which rays of light meet after refracting from a convex lens

**gamma rays** electromagnetic waves with the shortest wavelengths and highest energy

**illuminated** reflecting light that strikes it

**image** likeness or copy

**infrared rays** electromagnetic waves with long wavelengths and low energy

**iris** colored part of the eye around the pupil

**lens** piece of glass or plastic with curved surfaces that refracts light; part of the eye that focuses light rays on the retina

**light** form of energy that travels in waves that the human eye sees as visible light

**luminous** giving off its own light

**microwaves** electromagnetic waves with long wavelengths and low energy, used in microwave ovens

**mirage** illusion caused by the refraction of light rays

**opaque** blocking light

**optic nerve** nerve that carries messages from the eye to the brain

**primary colors of light** red, green, and blue light

**prism** solid, transparent object that refracts light that passes through it, separating the light into the colors of the visible spectrum

**pupil** opening in the center of the iris in the eye

**radio waves** electromagnetic waves with the longest wavelengths and lowest energy

**ray** narrow beam of light that travels in a straight line from a light source

**reflect** to bounce off a surface

**refraction** bending of light as it moves from one material into another

**retina** layer at the back of the eye that receives images

**shadow** dark area made when an object blocks light

**translucent** letting some, but not all, light through

**transparent** letting light pass through easily

**ultraviolet rays** electromagnetic waves that can cause sunburn and skin cancer

**visible spectrum** range of wavelengths in the electromagnetic spectrum that humans can see

**wave** rhythmic pattern that carries energy

**wavelength** distance from one wave crest to the next or from one wave trough to the next

**white light** light from a light source such as the sun, a flashlight, or a light bulb

**x-rays** electromagnetic waves used to take pictures of teeth and bones