Investigating Light Soundoff

Schaeffer Academy Rochester, MN

What is light?

Light is a form of energy. It travels in waves. The waves move in straight lines until they hit an object.

What happens when light hits an object?

The light may be transmitted, absorbed, reflected or refracted.

What does transmitted light mean?

Transmitted light is when light travels through an object. Light is transmitted when it travels through glass.

What happens when light is absorbed?

Light is absorbed when it cannot pass through an object. For example, a heavy blanket absorbs light.

What does it mean if light is reflected?

Light is reflected when it bounces off an object. Light bounces off mirrors and other shiny objects.

What happens when light is refracted?

Light is refracted when it gets bent trying to pass through something. Light is bent, or refracted, when it travels through water.

What is the visible spectrum?

The visible spectrum is the light energy that we can see.

What does it mean if something is transparent?

An object is transparent if we can see clearly through it. An example of a transparent object is glass.

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What is a translucent object?

A translucent object lets light through, but we cannot see through it clearly. Examples of translucent objects are waxed paper and frosted glass.

What causes a shadow?

A shadow is formed when an opaque object absorbs light.

What is the law of reflection?

The law of reflection states that the angle of a wave as it hits a smooth object equals the angle of the wave at which it bounces off the object. If light hits at a 45 degree angle, it will bounce off at a 45 degree angle.

What is a lens?

A lens is a curved transparent object that refracts, or bends, light.

What is diffraction?

Diffraction occurs when light waves bend slightly around an object.

What color is visible light?

Visible light is white. White light can be split into red, orange, blue, green, indigo, and violet.

Why do we see different colored objects?

We see the colors of light that the object doesn't absorb. Blue jeans absorb all colors except blue, which is reflected back to us. An object that reflects all colors is white; an object that absorbs all colors and reflects none is black.