

bioluminescence: The ability of some living things to produce light.

diffraction: Light's ability to bend a little to go around corners, and to spread out to fill a room.

electromagnetic radiation: Waves that make up the electromagnetic spectrum and travel by disrupting electric and magnetic fields.

fiber optics: Technology that makes it possible for laser light to carry information through a cable.

frequency: The number of times a wave crests in a particular unit of time.

incandescence: Light that is produced when a substance becomes so hot that it begins to glow.

laser: A tool that emits a tightly focused beam of light that has only one wavelength and does not diffract.

luminescence: Light that is given off when energy flows into a substance.

phosphorescence: The ability of some substances to continue to luminesce even after an energy source has been removed.

photosynthesis: The process by which a plant converts light energy to food.

reflection: Light's ability to hit certain objects and bounce off.

Books

Isaac Asimov, *How Did We Find Out About Lasers?* New York: Walker, 1990. An overview of the history of laser development and the basics of the way lasers work. Includes a discussion of how lasers are used today and how they might be used in the future.

Roy Gallant, *Rainbows, Mirages and Sundogs: The Sky as a Source of Wonder.* New York: Macmillan, 1987. An overview of light's special effects, along with some experiments to try.

Michael Pollard, *The Light Bulb and How It Changed the World.* New York: Facts On File, 1995. A history of the development of the lightbulb.

Alvin Silverstein, Virginia Silverstein, and Laura Silverstein Nunn, *Photosynthesis.* Brookfield, CT: Twenty-First Century, 1998. A good reference on the basics of how photosynthesis works and how scientists learned about it.

Steve Tomecek, *Bouncing and Bending Light.* New York: Scientific American Books for Young Readers, 1995. A guide for readers who would like to learn about light by doing their own experiments. A good reference for readers interested in learning more about how scientists observe natural phenomena.