

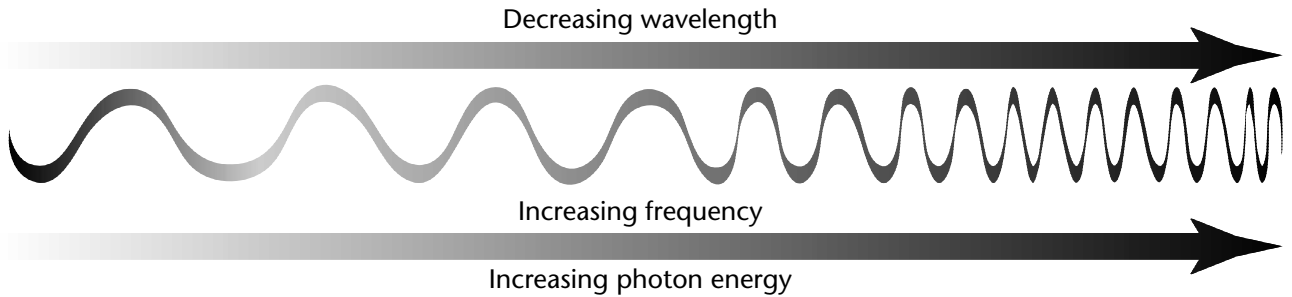
Chapter 18

Use with Section 1

ENRICHMENT

• Properties of Light

Creatures of the Spectrum



Gamma rays	X rays	Ultraviolet	Visible	Infrared	Microwave	Radio
used to kill cancer cells	used to examine bones and teeth; also used to "see" inside luggage for airport security	used to sterilize food and medical equipment	light we can see	used to cook food and for special "night vision" cameras and binoculars, which can "see" in the dark	used for cooking food and for radar	used for communication

Visible light is only a small part of the electromagnetic spectrum. It is important to humans because human eyes can see only that part of the spectrum. Other animals, however, see other sections of the spectrum. To humans, for instance, a daisy has a gold center surrounded by rays of white petals. Honeybees, however, see ultraviolet light, and when they look at a daisy, they see ultraviolet patterns that circle the flower's center. To the honeybee, the simple daisy looks like a bull's-eye.

If creatures live elsewhere in the universe, they may be able to "see" different parts of the electromagnetic spectrum than earthlings. Imagine that you have discovered a new life-form on another planet and have discovered that it "sees" a different band of the spectrum than humans. Using the spectrum information, describe your otherworldly creatures in the space below.
