### Lesson 1

surface below it

## **air pressure** the pressure that a column of air exerts on the air or

Quick Vocabulary

**dew point** temperature at which air near the ground becomes fully saturated with water

**humidity** amount of water vapor in the air

**kinetic energy** the energy an object has due to its motion

**precipitation** water, in liquid or solid form, that falls from the atmosphere

relative humidity amount of water vapor present in the air relative to the maximum amount of water vapor the air can contain at that temperature

variable a quantity that can change

water cycle a series of natural processes in which water continually moves among oceans, land, and the atmosphere

**weather** atmospheric conditions of a certain place at a certain time

#### Lesson 2

**air mass** large body of air with distinct temperature and moisture characteristics

**blizzard** violent winter storm characterized by freezing temperatures, strong winds, and blowing snow

**dominate** to exert the guiding influence on

**front** boundary between two air masses

**high-pressure system** large body of circulating air that has high pressure at its center and lower pressure on the outside

**hurricane** intense tropical storm with winds exceeding 119 km/h

**low-pressure system** large body of circulating air that has low pressure at its center and higher pressure on the outside

**tornado** violent, whirling column of air that comes in contact with the ground

# Quick Vocabulary

#### Lesson 3

**computer model** detailed program that solves a set of complex mathematical formulas

**Doppler radar** specialized radar that can detect precipitation and movement of small particles and can approximate wind speed

**isobar** line on a map used to connect all places where air pressure has the same value

**surface report** describes a set of weather measurements made on Earth's surface

**upper-air report** describes wind, temperature, and humidity conditions above Earth's surface