

## GLOSSARY

### A

**albedo** percent of solar radiation reflected by a surface (466)

**atmospheric pressure** ratio of the force of the air to the area of the surface on which it presses (457)

### B

**barometer** instrument that measures atmospheric pressure (458)

### C

**climate** general weather conditions over many years (455)

**conduction** type of energy transfer in which vibrating molecules pass heat along to other vibrating molecules by direct contact (468)

**convection cell** looping pattern of flowing air (470)

### D

**doldrums** narrow zone of low air pressure at the equator characterized by weak and un dependable winds (471)

### E

**electromagnetic spectrum** complete range of wavelengths of radiation (463)

**exosphere** layer of the atmosphere above the ionosphere that merges with interplanetary space (461)

### G

**greenhouse effect** process by which the atmosphere traps infrared rays over the Earth's surface (467)

### H

**horse latitudes** subtropical high-pressure belt of air, around 30° latitude (471)

## GLOSSARY

### I

**ionosphere** lower region of the thermosphere, at an altitude of 80 to 550 km (461)

### J

**jet streams** bands of high-speed, high-altitude westerly winds(472)

### M

**mesopause** upper boundary of the mesosphere, marked by an increase in temperature (461)

**mesosphere** coldest layer of the atmosphere that extends upward from the stratosphere to an altitude of about 80 km (461)

### N

**nitrogen cycle** process in which nitrogen moves from the air to the soil to animals and back to the air (457)

### O

**ozone** form of atmospheric oxygen that has three atoms per molecule (455)

### P

**polar easterlies** weak global winds located north of 65° north latitude and south of 65° south latitude that flow away from the poles (472)

### S

**standard atmospheric pressure** the atmospheric pressure measured at sea level; 760 mm of mercury (459)

**stratopause** high-temperature zone that marks the upper boundary of the stratosphere (460)

**stratosphere** layer of the atmosphere that extends upward from the troposphere to an altitude of 50 km; contains most atmospheric ozone (460)

**subpolar low** belt of low air pressure at about 60° north and 60° south latitude (472)

## GLOSSARY

### T

**temperature inversion** atmospheric condition in which warm air traps cooler air near the Earth's surface (462)

**thermosphere** the atmospheric layer above the mesosphere (461)

**trade winds** global winds flowing toward the equator between 30° and 0° latitude (470)

**tropopause** upper boundary of the troposphere in which the temperature remains almost constant (460)

**troposphere** atmospheric layer closest to the Earth's surface where nearly all weather occurs (460)

### W

**weather** general condition of the atmosphere at a particular time and place (455)

**westerlies** global winds located between 40° and 60° latitude that flow from the southwest in the Northern Hemisphere and from the northwest in the Southern Hemisphere (471)