

PRACTICE 3

Questions 1 through 4 are based on the information on page 542.

1. The diagram of global wind patterns on page 542 suggests that weather systems between 30°N and 60°N generally move in which direction?

- A. northeast to southwest
- B. northwest to southeast
- C. southeast to northwest
- D. southwest to northeast

2. Based on the diagram on page 542, how do the prevailing winds in the Northern Hemisphere compare to the prevailing winds in the Southern Hemisphere?

- A. The winds in the Northern Hemisphere blow faster than those in the Southern Hemisphere.
- B. The winds in the Northern Hemisphere are a mirror image of those in the Southern Hemisphere.
- C. The winds in the Northern Hemisphere blow east and those in the Southern Hemisphere blow west.
- D. The winds in the Northern Hemisphere blow west and those in the Southern Hemisphere blow east.

3. Hurricanes are violent storms with high winds and rain that form over the ocean. They cover an area 300 to 600 miles across and move relatively slowly—between 5 and 15 miles per hour. Meteorologists can now predict their paths with a great deal of accuracy.

Which of the following technologies best accounts for accurate hurricane tracking?

- A. anemometers, which measure wind speed
- B. thermometers, which measure air temperature
- C. the Beaufort wind scale, a method of estimating wind speed
- D. satellites, which transmit cloud photos and weather data

4. Which of the following help even out the unbalanced heating of Earth as a whole?

- A. precipitation associated with fronts
- B. local air masses
- C. tornadoes, blizzards, and floods
- D. global wind and ocean current patterns

Questions 5 and 6 refer to the following chart.

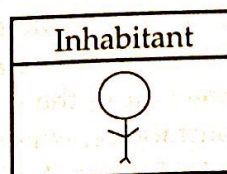
Layers of the Atmosphere

Layer	Altitude	Temperature
Troposphere	0 to 6 miles	Average 59°F
Stratosphere	6 to 31 miles	-76°F to 32°F
Mesosphere and ionosphere	31 to 50 miles	32°F to -212°F
Thermosphere	50 to 435 miles	Up to thousands of degrees

5. For which of the following statements does the chart provide evidence?

- A. The higher you go in the atmosphere, the colder it gets.
- B. The higher you go in the atmosphere, the less oxygen there is to breathe.
- C. The highest layer of the atmosphere is the stratosphere.
- D. The highest temperatures in the atmosphere are in the thermosphere.

6. In the chart, draw a stick-figure inhabitant in the atmospheric layer in which most human activity takes place.



Answers and explanations start on page 706.