

The Atmosphere and Weather

Use your textbook to help you fill in the blanks.

How does the Sun warm Earth?

1. Sunlight strikes Earth with the most vertical angle at the _____.
2. An area near the _____ receives less energy from sunlight than an area of the same size near the _____.

What are the layers of the atmosphere?

3. When energy from the Sun hits the Earth, 50 percent is absorbed by _____, and 20 percent is absorbed or reflected by _____.
4. Particles of gas in the air pressing on Earth's surface create a force called _____.

What changes air pressure?

5. Atmospheric pressure decreases as altitude _____.
6. As humidity increases, air pressure _____.

What are global winds?

7. Winds that blow between 30°North and 30°South latitudes are called the _____.
8. Air pressure near the equator is _____ than air pressure near the poles, a fact that causes air to move from the _____ toward the _____.

9. Winds that blow south from the North Pole curve to the _____ because of the _____.

What are local winds?

10. During the day, the Sun heats land more quickly than it heats water, so a(n) _____ blows; during the night, water cools more slowly than land does, so a(n) _____ blows.
11. In the morning, valley breezes blow _____; in the afternoon, mountain breezes blow _____.

How do we measure air pressure and wind?

12. Air pressure is measured with a(n) _____; wind speed is measured with a(n) _____; wind direction is measured with a(n) _____.

Critical Thinking

13. How does Earth's shape affect global temperatures and wind patterns?
