

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Standard sea level pressure is \_\_\_\_\_.  
A) about 870 mb (25.70 inches of mercury)                      B) about 902 mb (26.71 inches of mercury)  
C) about 1013 mb (29.92 inches of mercury)                      D) about 1084 mb (32.01 inches of mercury)
- 2) Lines on a weather map connecting places of equal air pressure are called \_\_\_\_\_.  
A) isobars                      B) isopleths                      C) isovectors                      D) isotherms
- 3) Which of the following does **not** contribute to controlling the motion of the wind?  
A) Coriolis effect                      B) friction  
C) ozone layer (and hole)                      D) pressure gradient force
- 4) \_\_\_\_\_ are high-elevation "rivers" of air that travel between 120 and 240 kilometers (75 and 150 miles) per hour in a west-to-east direction.  
A) Chinooks                      B) Jet streams                      C) Valley breezes                      D) Anticyclones
- 5) You are getting ready to go for a hike on a summer day. You check the barograph and discover that the pressure tendency has been rising for several hours. Based on this information, what gear should you be sure to pack for your hike?  
A) a rain jacket                      B) a helmet                      C) sunscreen                      D) snowshoes
- 6) The \_\_\_\_\_ is characterized by subsidence and divergence near the 30° latitude, north and south, and consists of several semipermanent, anticyclonic centers.  
A) subtropical high                      B) trade winds                      C) Hadley cell                      D) polar front
- 7) A wind that blows down the leeward side of a mountain and warms by compression is called a \_\_\_\_\_.  
A) sea breeze                      B) mountain breeze                      C) chinook                      D) monsoon
- 8) \_\_\_\_\_ is the deflective force of Earth's rotation on all free-moving objects including the atmosphere and oceans.  
A) The pressure gradient force                      B) The Coriolis effect  
C) The geostrophic wind                      D) The jet stream
- 9) An anemometer measures \_\_\_\_\_.  
A) wind speed                      B) atmospheric pressure  
C) wind direction                      D) precipitation
- 10) \_\_\_\_\_ are small-scale winds produced by a locally generated pressure gradient.  
A) Regional winds                      B) Prevailing winds                      C) Local winds                      D) Ocean breezes
- 11) The Sahara and Australian deserts (among others) are associated with the \_\_\_\_\_.  
A) subtropical high                      B) subpolar low                      C) anticyclone                      D) equatorial low
- 12) A sea breeze usually originates during the \_\_\_\_\_.  
A) day and flows toward the land                      B) day and flows toward the water  
C) evening and flows toward the land                      D) evening and flows toward the water



27) At night, the air above the mountain slopes \_\_\_\_\_ and drains into the warm valley below, creating a \_\_\_\_\_.

- A) cools rapidly; mountain breeze
- C) cools slowly; mountain breeze

- B) warms rapidly; valley breeze
- D) warms slowly; valley breeze

28) Which of the following is the driving force of wind?

- A) prevailing wind direction
- C) horizontal pressure gradient

- B) isobar movement
- D) vertical pressure gradient

