

Name: _____

Date: _____ Period: _____

Midterm Review

The Physical Setting: Earth Science

Midterm Review: Water and Climate

- Which processes are most likely to cause a rise in the water table?
 - runoff and erosion
 - precipitation and infiltration
 - deposition and burial
 - solidification and condensation
- Which two processes lead to cloud formation in rising air?
 - compressing and cooling
 - compressing and warming
 - expanding and cooling
 - expanding and warming
- Which current has a cooling effect on the climate of the west coast of South America?
 - Falkland Current
 - Benguela Current
 - Peru Current
 - Brazil Current
- Near which two latitudes are most of Earth's dry climate regions found?
 - 0° and 60°N
 - 0° and 30°S
 - 30°N and 60°N
 - 30°N and 30°S
- A city located on the coast of North America has warmer winters and cooler summers than a city at the same elevation and latitude located near the center of North America. Which statement best explains the difference between the cities' climates?
 - Ocean surfaces change temperature more slowly than land surfaces.
 - Warm, moist air rises when it meets cool, dry air
 - Wind speeds are usually greater over land surfaces than over ocean surfaces.
 - Ocean surfaces have a lower specific heat than land surfaces.
- During an El Niño event, the South Equatorial Current reverses direction and flows over the top of northern portions of the Peru Current, causing
 - warmer surface ocean waters along the northeast coast of South America
 - warmer surface ocean waters along the northwest coast of South America
 - cooler surface ocean waters along the northeast coast of South America
 - cooler surface ocean waters along the northwest coast of South America
- During a rainstorm, when soil becomes saturated, the amount of infiltration
 - decreases and runoff decreases
 - decreases and runoff increases
 - increases and runoff decreases
 - increases and runoff increases

Midterm Review: Water and Climate

8. Which ocean current warms the climate of northwestern Europe?
 - a. North Atlantic Current
 - b. Canary Current
 - c. North Equatorial Current
 - d. Labrador Current

9. During which Northern Hemisphere season is Earth closest to the Sun?
 - a. spring
 - b. summer
 - c. autumn
 - d. winter

10. Global warming is most likely occurring due to an increase in
 - a. carbon dioxide and methane gases in the atmosphere
 - b. oxygen and nitrogen gases in the atmosphere
 - c. ultraviolet radiation and x rays reflected from Earth
 - d. visible light and radio waves reflected from Earth

11. El Cuy is a South American city located at 40° south latitude. The first day of winter at this location occurs on June 21. During which month would the coldest day of the year most likely occur at this location?
 - a. May
 - b. November
 - c. July
 - d. January

12. A paved blacktop parking lot was built on what was once a soil-covered field. This area will now experience increased runoff when rain occurs because the paved parking lot has
 - a. less capillarity
 - b. greater infiltration
 - c. less permeability
 - d. greater porosity

13. Which processes of the water cycle return water vapor directly to the atmosphere?
 - a. evaporation and transpiration
 - b. infiltration and capillarity
 - c. freezing and precipitation
 - d. water retention and runoff

14. Seasonal changes on Earth are primarily caused by the
 - a. parallelism of the Sun's axis as the Sun revolves around Earth
 - b. changes in distance between Earth and the Sun
 - c. elliptical shape of Earth's orbit around the Sun
 - d. tilt of Earth's axis as Earth revolves around the Sun

15. The least amount of surface water runoff will occur when soil pore spaces are
 - a. saturated and the slope is steep
 - b. saturated and the slope is gentle
 - c. unsaturated and the slope is steep
 - d. unsaturated and the slope is gentle