

Benchmark II Review

1. Explain how burning fossil fuels impacts precipitation?

2. Why do the Northern and Southern hemispheres experience opposite seasons?

3. What source in the solar system is mainly responsible for electromagnetic radiation?

4. What process is responsible for the formation of stalagmites and stalactites?

5. What 2 processes must take place in order for sediments to form?

6. Which element is most active during chemical weathering?

7. Which process drives tectonic activity?

8. At which plate boundary would you expect to find new crust?

9. What feature is most commonly associated with transform plate boundaries?

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10. How did fossil evidence support the continental drift hypothesis?

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11. Explain how planting trees can prevent erosion of the A horizon

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12. How can plants like moss and lichen breakdown a rock?

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13. Which plate boundaries are mostly associated with volcanoes?

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14. Describe the tectonic plate movement in the East African Rift Valley

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16. Which types of crust were involved in forming folded mountains like the Appalachian mountains?

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17. How did Alfred Wegner determine the existence of supercontinents like Pangaea?

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18. How can geographic location influence the weather of an area?

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19. Describe the impact of El Niño on the hydrosphere and atmosphere

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20. What is the driving force for hurricanes?

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21. Describe the formation of land breezes and sea breezes. (Time of day and location)

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22. Why is water vapor considered a greenhouse gas?

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23. The Gulf Stream in the Atlantic ocean starts out as a warm water current in the Gulf of Mexico and flows towards Ireland. Based on this information, what type of climate would you expect to experience in Ireland?

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24. Why do hurricanes often form near the equator?

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25. How does the temperature of ocean currents impact continental climates?

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26. the salt that is used to melt icy roads, collects on a road, then what process will cause the salt to move to bodies of freshwater?

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27. A gyre is large system of rotating ocean currents. In order to track pollutants in a gyre in the Northern Hemisphere, what rotational pattern should you follow? Clockwise or Counterclockwise?

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28. What will happen to the water table of an aquifer if there is a decrease in the amount of recharge?

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29. What type of weather would you predict after learning of an approaching low pressure system?

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30. What will happen when a warm air mass collides with a cool air mass? What type of weather would you expect as result of this interaction?

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31. What are the 2 most common greenhouse gases?

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32. What causes a hurricane to weaken once it reaches a landmass?

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33. If an air mass is moving from the equator and over the Gulf of Mexico, what temperature and moisture would you expect to feel?

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34. An air mass moves from Canada towards Mexico, what type of temperature and moisture would expect to feel in air?

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35. Describe the typical formation and movement of a hurricane that reach North Carolina.

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36. Describe the type of electromagnetic radiation energy that is absorbed by our ozone layer

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37. Burning fossil fuels such as coal and oil can cause acid rain. Nuclear energy (uranium) and Natural Gas are the 2 best sources of energy for the environment. How can acid rain impact the environment?

38. Describe the relationship between chlorofluorocarbons and the ozone layer.

39. If air mass is stuck over the Gulf of Mexico, describe the temperature and moisture you would expect to feel.