

Name: _____

Period: _____

Wind and Pollution Review

Section 3 know:

Wind	Polar easterlies
Coriolis effect	Jet stream
Trade winds	Sea Breeze
Westerlies	Land Breeze

Section 4 know:

Air Pollution	Particulate matter
Acid Precipitation	Photochemical smog

Section 3 Review

In the space provided, write the letter of the description that best matches the term or phrase.

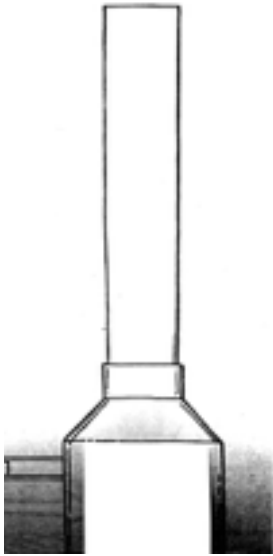
- | | |
|---------------------------|---|
| _____ 1. Coriolis effect | a. prevailing winds that blow from west to east between 30° and 60° latitude in both hemi- spheres |
| _____ 2. global winds | b. the curving of the path of a moving object from an otherwise straight path due to Earth's rotation |
| _____ 3. trade winds | c. polar easterlies meet warm air from the westerlies, creating a stormy area |
| _____ 4. westerlies | d. prevailing winds that blow from east to west between 60° and 90° latitude in both hemispheres |
| _____ 5. polar easterlies | e. prevailing winds that blow from 30° to 0° latitude in both hemispheres |

6-10 Fill in the blank

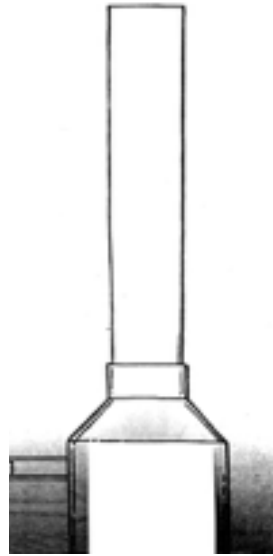
- The _____ the difference of air pressure, the _____ speed of air movement.
- Air pressure moves from areas of _____ pressure to areas of _____ pressure.
- Land _____ and _____ faster than water.
- Water holds _____ much longer than land does.
- A(n) _____ is wind that blows from the sea to the land due local temperature and pressure difference.
- Describe what would happen if there was no Coriolis affect and why.

12-13 Draw a labeled diagram of both the cold water and hot water convection tube. Use arrows to show the movement of the smoke. Additionally, describe the speed and concentration of the smoke.

Cold



Hot



14. In the heating and cooling of earth's surface lab, which surface heated faster during the day?
15. In the heating and cooling of earth's surface lab, which surface held heat longer at night?
16. In the heating and cooling of earth's surface lab, which surface heated slower during the day?
17. In the heating and cooling of earth's surface lab, which surface cooled faster at night?
18. A land breeze blows during the _____ from _____ to _____.
19. A sea breeze blows during the _____ from _____ to _____.
20. Circle in the picture below where the air becomes dense and sinks due to its coldness.



21. Circle in the picture below where the air becomes less dense and rises due to heat.



22. What heat transfer is demonstrated by the interaction of air at the poles and the equator?

23. What effect causes the curving of global winds? _____

24. City A and City B are at the same altitude. The daytime temperature in City A is 19 degrees celsius and 35 degrees celsius in City B. Which city has higher air pressure? How do you know?

Section 4 Review

1. Provide 1 similarity and 1 difference between smog and acid precipitation.

1. Similarity _____

2. Difference _____

2. What is name given to the combination of moisture and sulfur oxide? _____

3. What danger does particulate matter pose to humans?

4. What is air pollution that forms from the interaction between chemicals in the air and sunlight?

5. Name 3 sources of pollution caused by human activity?

6. Provide 1 problem when the wind blows pollution in an area and 1 problem when the wind doesn't blow pollution.

When the wind blows pollution:

When the wind doesn't blow pollution:
