

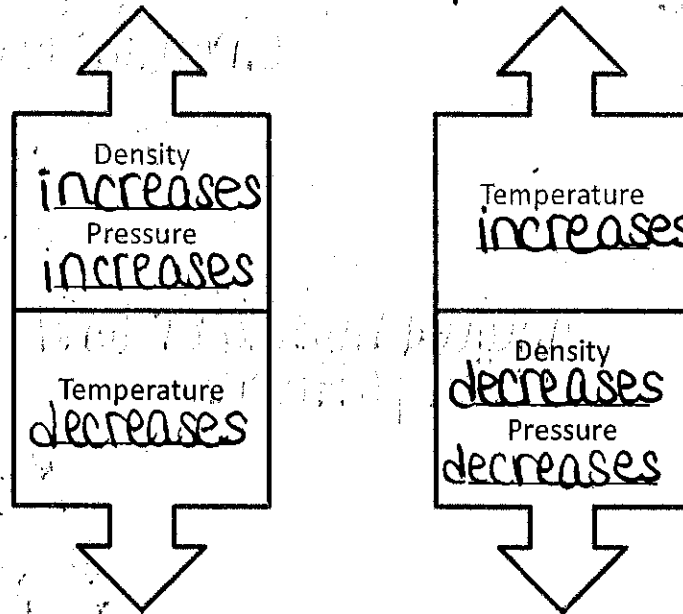
# Wind Movement Notes

Name \_\_\_\_\_

Date \_\_\_\_\_

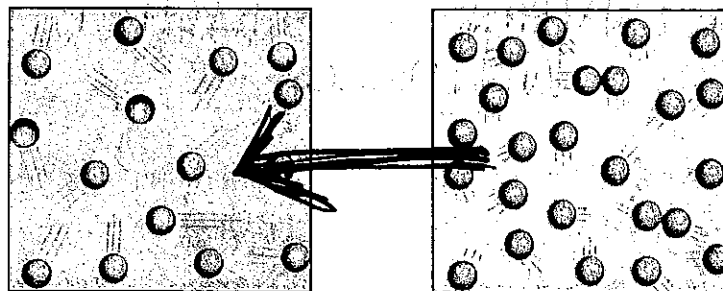
Period \_\_\_\_\_

1. Explain why there is uneven heating on the Earth's surface. The earth is tilted on its axis as it revolves, sun strikes the earth at different angles
2. The uneven heating of land forms wind systems
3. What causes wind? differences in air pressure
4. Fill in the diagrams



Opposites!

5. Fill in the information in the diagrams below for temperature, density, and pressure. Draw an arrow to represent the direction in which the wind would blow. Why would the wind blow in that direction? Wind moves from areas of high pressure to areas of low pressure.



High Temperature  
Lower Density  
\* Lower Pressure

Lower Temperature  
High Density  
\* High Pressure

6. Describe which areas of the earth's surface have air that is low pressure (low density).  
 Why does the air in this area have low pressure (low density)? the air is warmer in low pressure/density areas, more direct sunlight (equator)
7. Describe which areas of the earth's surface have air that is high pressure (high density).  
 Why does the air in this area have high pressure (high density)? air is cooler in areas of high pressure/density, less direct sunlight (poles)

Differences in

8. densities and pressure cause wind and air movement.

9. What is a convection current? heat moving in circular currents

10. Describe an example of a convection current. lava lamp, currents in the mantle, boiling water in a pot

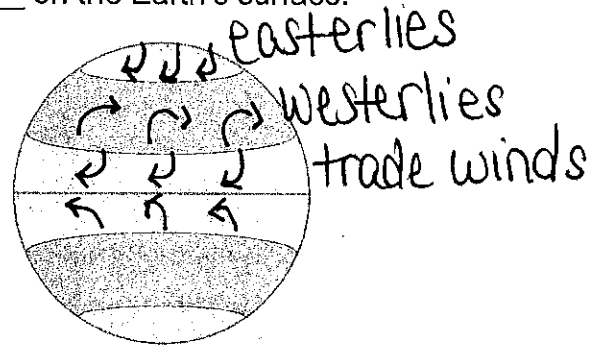
11. How does air move in a convection current? circular currents, warm ↑ cool ↓

12. Large convection currents are formed because of temperature differences between equator + poles. This produces global wind systems

13. How does the rotation of the Earth affect winds? earth rotates to the east, winds in N. Hemisphere curve right, curve left in S. Hemisphere

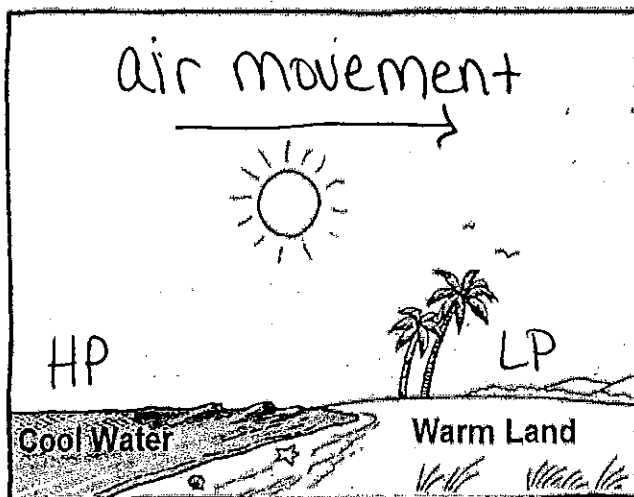
14. The flow of air caused by unequal heating of land and the rotation of the earth creates distinct wind patterns on the Earth's surface.

15. Draw arrows in the diagram illustrating how the rotation of the Earth affects global wind patterns.

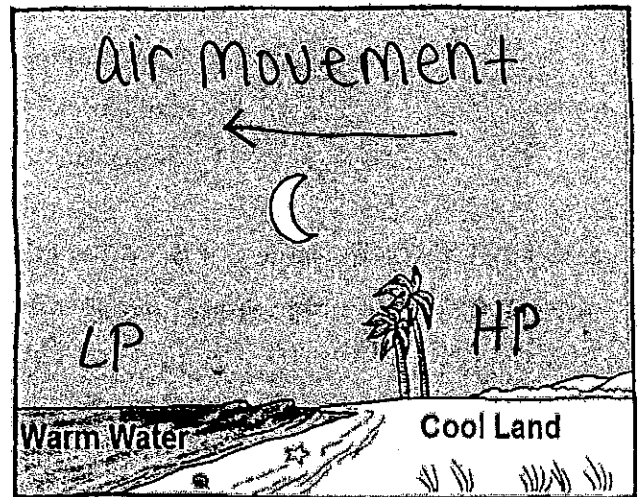


16. Global wind systems determine the major weather patterns for the entire planet. Smaller wind systems affect local weather. Two such wind systems are sea breezes and land breezes.

17. Label and draw the following in the diagrams below: sea breeze, land breeze, high pressure, low pressure, arrows showing the direction of the wind.



sea breeze



land breeze