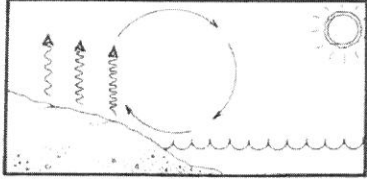
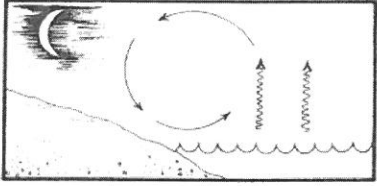
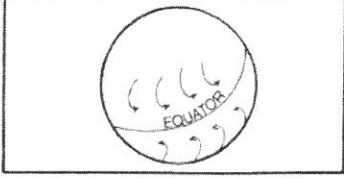


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Use your Science Notebook/Binder to assist you.

Air Currents: Current Phenomena

Give the term and the description that each picture describes.

<u>Picture</u>	<u>Term</u>	<u>Description</u>
		
		
		

Global Wind Patterns:

1. Describe the characteristics of each category of Global Winds:

- a. Doldrums:
- b. Horse Latitudes:
- c. Trade Winds:
- d. Prevailing Westerlies:
- e. Polar Easterlies:

2. Name which of the Global Winds has the greatest effect on weather in Michigan:

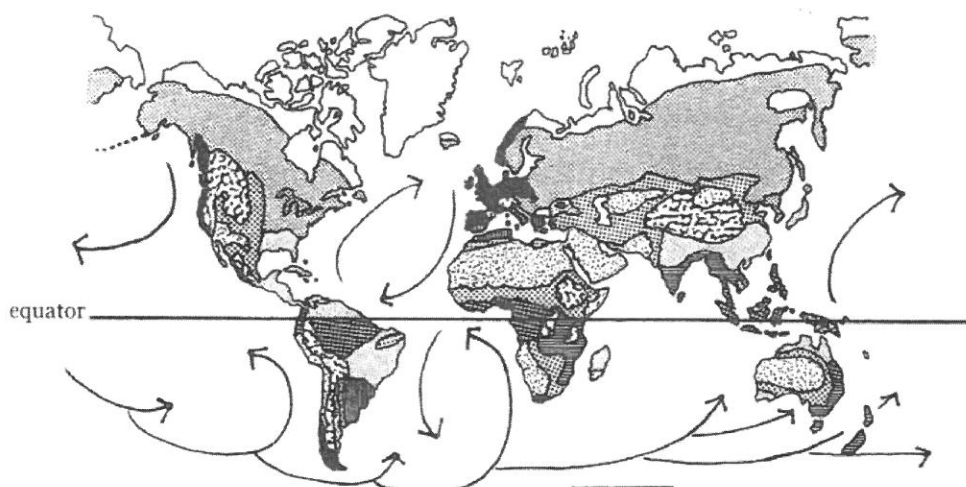
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3. Describe how heat from the sun affect the air in our atmosphere?
4. Explain why **convection** takes place in the **troposphere**:
5. Winds are caused by differences in which factor?
6. Areas of high and low pressure in our atmosphere are caused by differences in the Earth's _____. Explain your reasoning.
 - A) elevation (unequal land)
 - B) humidity (unequal water vapor)
 - C) temperature (unequal heating)

Ocean Currents:

7. Explain where **warm water ocean currents come from** and where **cold water ocean currents come from**.

8. Color the Ocean Currents on the map below according to the temperature of the water.



Name _____ Hour _____ Date _____

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- 9. East coast climates will have (*warmer or cooler*) due to the temperature of the ocean currents near them.**
- 10. West coast climates will have (*warmer or cooler*) due to the temperature of the ocean currents near them.**
- 11. Describe how ocean surface currents are related to the patterns of global winds.**
- 12. Draw a picture and explain how the ocean currents are a model of convection currents.**

Weather vs. Climate

- 13. Explain the difference between weather and climate.**
- 14. Explain why it is important to study climate:**
- 15. Which layer of the atmosphere does most weather occur in? Why?**

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16. What climatic region is Michigan in? How does this help explain our weather?

Air Masses and Fronts

17. An air mass is a huge body of air that has similar...(list the features below)

A.

B.

C.

18. The characteristics of an air mass depend on what?

1.

2.

19. What name is given to an air mass that forms over water? Over land?

20. What is a front?

Name _____ Hour _____ Date _____

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21. Fill in the table below about the four types of fronts:

Front Type	How Forms	Types of Weather

