

Name: Key Period: _____ Date: _____

ATMOSPHERE AND WIND STUDY GUIDE

Connect each of the following words to its definition.

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|--|--------------------|
| <u>E</u> 1. Where weather occurs, where we live. | A. Oxygen |
| <u>J</u> 2. The spinning of the winds caused by the Earth. | B. Conduction |
| <u>I</u> 3. Heat transfer through a cycle, up & down. | C. Ionosphere |
| <u>K</u> 4. Hottest and least dense layer. | D. Barometer |
| <u>M</u> 5. Where meteors burn up in our atmosphere. | E. Troposphere |
| <u>L</u> 6. Protects the Earth from solar radiation. | F. Nitrogen |
| <u>A</u> 7. Makes up 20% of our atmosphere. | G. Stratosphere |
| <u>B</u> 8. Heat transfer through direct contact. | H. Radiation |
| <u>D</u> 9. Instrument used to measure air pressure. | I. Convection |
| <u>H</u> 10. Heat transfer through open space, the sun. | J. Coriolis effect |
| <u>G</u> 11. Where the ozone and jet stream is. | K. Thermosphere |
| <u>F</u> 12. Makes up 78% of our atmosphere. | L. Ozone |
| <u>C</u> 13. Made of electrically charged particles. | M. Mesosphere |

Multiple Choice: Circle the correct answer choice for each question.

- Auroras are caused by electrically charged particles that are called:
a. molecules c. pressures
 b. ions d. atoms
- Gasses that trap heat in the atmosphere are called:
a. Fluorocarbons c. greenhouse gasses
b. Argon d. convection currents
- During the day _____ heats up faster than _____.
a. Land, land c. ocean, ocean
b. Ocean, land d. land, ocean
- Wind is caused by:
a. The tilt of the Earth c. Differences in temperature
b. Water in the air d. Ocean currents

5. Air is made of molecules, and thus gravity gives it:

- a. Weight
- b. Definition
- c. volume
- d. heat

Fill in the spaces

1. Winds are named based on where they COME FROM.
2. The weight of the atmosphere is called AIR PRESSURE.
3. Differences in air pressure are caused by:

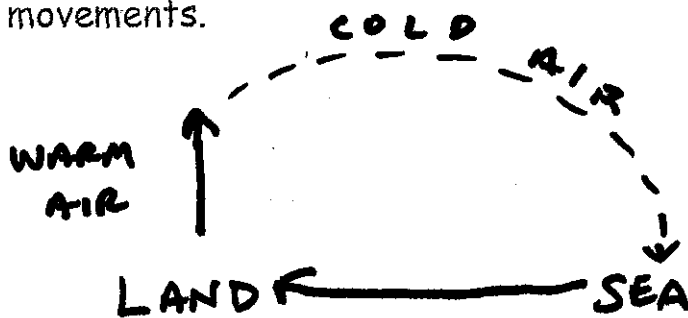
UNEVEN HEATING OF EARTH'S SURFACE

4. Another name for thermal energy is HEAT.
5. What is the difference between Weather and Climate?

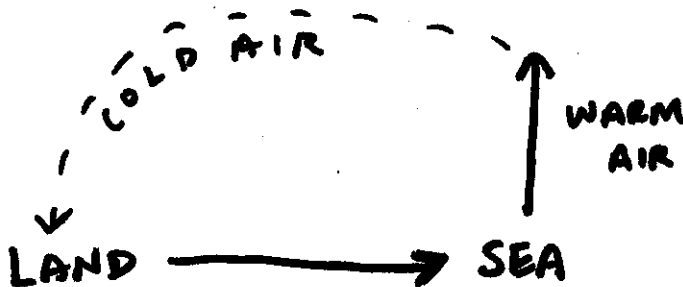
WEATHER IS DAY TO DAY CONDITIONS

CLIMATE IS WEATHER OVER TIME

6. Draw a diagram explaining a Land Breeze and a Sea Breeze complete with air movements.



**SEA BREEZE
(DAY TIME)**



**LAND BREEZE
(NIGHT TIME)**