**WEATHER: Test**

**NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**(2 pts. Each) Match the vocabulary with the correct definition.**

\_\_\_\_1. Condensation

\_\_\_\_2. Convection

\_\_\_\_3. Radiation

\_\_\_\_4. Conduction

\_\_\_\_5. Density

\_\_\_\_6. Air mass

\_\_\_\_7. Vortex

\_\_\_\_8. Tornado

\_\_\_\_9. Hurricane

\_\_\_\_10. Land Breeze

\_\_\_\_11. Stable Air Mass

\_\_\_\_12.Unstable Air Mass

\_\_\_\_13. Heat transfer

\_\_\_\_14.Evaporation

\_\_\_\_15. Humid

A. When an item takes on heat energy and changes to a gas state.

B. The process of heat energy moving from cold to hot.

C. When an item releases heat energy and changes to a liquid state.

D. Moisture

E. A type of vortex that forms over land.

F. A type of vortex that forms over water.

G. The ratio of a substances mass to volume.

H. Referring to heat transfer by waves.

I. Referring to heat transfer by density difference

J. An airmass where the temperature remains the same at all altitudes.

K. An airmass where the temperature differences between low and high altitude.

L. A type of air movement that occurs during the evening hours where colder air over land sinks under hot air over water.

M. Referring to heat transfer by touch.

N. A type of air movement that is rotational in storms.

O. Pocket of similar air types.

**(20 pts.) Draw and label the water cycle.**

**(10 pts. Each) Short Essay**

1. Explain density.

2. Explain what can happen when a cold dry front meets a hot, humid front over land?

3. Why do hurricanes loose energy when going over land?

4. Explain the urban bubble. Why do cities have their own weather/climate?

5. What is convection and how does it drive our weather systems? (Use a diagram/lab experience to help explain)