

Earth/Environmental Science Homework & Test Review**Week 8: March 9th – March 13th****DUE DATE: Friday, March 13th****Vocabulary:** Fill in the missing areas on the table below using your textbook, class activities and any other resources you find helpful.

Vocabulary Word	Definition
Dry Line Boundary	Dry line boundary where warm maritime tropical air; hot, dry air; and cool polar, dry air meet
Cyclone	A cyclone is a system of winds rotating counterclockwise in the Northern Hemisphere around a low pressure center.
Tornado Watch	Means conditions are favorable for a tornado.
Tornado Warning	Means a tornado has been spotted.
Fujita Scale	Assigns a value based on wind speed and damage of a tornado from F0 to F5
Hurricane Watch	Means a hurricane may hit within 48 hours
Hurricane Warning	Means a hurricane may hit within 36 hours
Saffir-Simpson Scale	Measure the size and wind speed of a hurricane (Category 1-5). Where 1 is weak and 5 is major.

Key Questions from the Week: Answer the questions below pertaining to this week.**1. What is the difference between an air-mass thunderstorm and a frontal thunderstorm?**

- Air mass: Air rose because of unequal heating of Earth's surface
- Frontal: When advancing cold fronts pushes warm air rapidly upward

2. How does thunder form? Lightening?

Thunder: A lightning bolt travels from the cloud to the ground it opens up a little hole in the air, called a channel. The air collapses back in and creates a sound wave.

Lightening: negative charges (electrons) in the bottom of the cloud are attracted to the positive charges (protons) in the ground

3. Explain how hurricanes form and gain their "strength."

Hurricanes form when warm moist air rises over tropical waters and winds speeds reach beyond 73 mph. This is why hurricanes lose a lot of their strength once they reach land because they are no longer "fueled" by the warm oceans.

4. Explain how tornadoes form.

One way a tornado forms is when moist, warm air meets cool, dry air head on. They are also spawned from a type of rotating storm called a supercell thunderstorm. And they are all driven by atmospheric instability and by a phenomenon known as wind shear.

****CONTINUES ON BACKSIDE OF PAPER****

Matching: Match the term with its description. Use your weather reference tables to assist you.

<u>h</u> Wind Sock	a) measures temperature
<u>c</u> Rain gauge	b) measures sunshine
<u>g</u> Barometer	c) measures the amount of rainfall
<u>a</u> Thermometer	d) measure direction and speed of wind
<u>d</u> Anemometer	e) measures the size of hail that falls during a storm
<u>i</u> Hygrometer	f) measures wet bulb and dry bulb to determine temperature, dewpoint and relative humidity
<u>f</u> Sling Psychrometer	g) measure atmospheric pressure
<u>e</u> Hail Pad	h) measure direction and speed of wind using fabric
<u>b</u> Campbell Stokes Recorder	i) measures humidity

<u>d</u> Snow	a) Droplets that freeze as they get closer to the ground
<u>a</u> Sleet	b) Cloud on the ground
<u>f</u> Hail	c) White, puffy clouds. Associated with fair to pleasant weather
<u>g</u> Cirrus	d) Vapor that changes directly into crystalline flakes at 32°F or 0°C
<u>c</u> Cumulus	e) Bring heavy rain, snow, hail lightning and even tornados
<u>e</u> Cumulonimbus	f) Droplets of water freeze around ice crystals
<u>b</u> Fog	g) Composed of ice. Thin and wispy.

Concept Map: Complete the following concept map using the provided word bank. Each word is used only once.

Word Bank

- Rain
- The dew point
- Water vapor
- Precipitation
- Clouds
- Evaporates
- Snow
- Water
- Sleet

