Air Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_

# Study Guide – Fronts and Systems

**A. Matching – match each of the following definitions to the correct term**

|  |
| --- |
| 1. Front
2. Cold Front
3. Warm Front
4. Stationary Front
5. Thunderstorm
6. Hurricane
7. Tornado
8. High pressure
9. Low pressure
10. Maritime
11. Polar
12. Continental
13. Tropical
14. Air Mass
 |

1. \_\_\_\_J\_\_\_\_ Air mass that forms over water – moist air
2. \_\_\_\_M\_\_\_\_ Air mass that forms close to the equator – warm air
3. \_\_\_\_D\_\_\_\_ Warm and cold air mass meet with the same force
4. \_\_\_\_N\_\_\_\_ Large body of air with the same temperature and humidity
5. \_\_\_\_L\_\_\_\_ Air mass that forms over land – dry air
6. \_\_\_\_B\_\_\_\_ Cold air mass runs into a warm air mass forcing the warm air up
7. \_\_\_\_C\_\_\_\_ Warm air mass runs into a cold air mass and slides over the top
8. \_\_\_\_K\_\_\_\_ Air mass that forms far from the equator – cold air
9. \_\_\_\_A\_\_\_\_ Boundary between air masses
10. \_\_\_\_H\_\_\_\_ System that usually brings clear skies and calm weather
11. \_\_\_\_I\_\_\_\_ System that usually brings stormy weather and high winds
12. \_\_\_\_E\_\_\_\_ Takes place in a cumulonimbus cloud, includes thunder, lightning, wind, and rain
13. \_\_\_\_F\_\_\_\_\_ Spiral arrangement of thunderstorms that form over warm ocean waters
14. \_\_\_\_G\_\_\_\_\_ Violently rotating column of air between a cumulonimbus cloud and the ground

 **B. Fill in the blank**

1. A(n) \_\_\_\_\_\_Cold Fronts\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ front creates heavy rain and thunderstorms.
2. A(n) \_\_\_\_\_\_Warm Fronts\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ front creates light rain and thin clouds.
3. A(n) \_\_\_\_\_\_\_High Pressure System\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ brings clear skies and calm weather.
4. A(n) \_\_\_\_\_\_Low Pressure System\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ brings stormy weather and strong winds.

**C. Short Answer: Using the map given, answer the following questions.**



1. What type of front is moving into Florida? How should the weather change?

 Cold Front, The weather will change to thunderstorms and heavy rain

1. What kind of weather system is over Texas? What type of weather should they expect?

 High Pressure System, Weather will be clear sky and sunny.

1. What kind of weather system is causing the cloud cover and storms on the east coast?

Low Pressure System

**D. Short Answer: Answer each of the following questions completely.**

1. Name the four major types of weather fronts and draw the symbol for each.

 Warm Fronts

Cold Fronts

Stationary Fronts

Occluded Fronts

1. The weather in Phoenix cooled down this week and there were large thunderstorms with cumulonimbus clouds. What kind of weather system and what kind of front caused this change?

 A low pressure system carrying a cold front caused this change in weather.