**Weather Study Guide Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Fill in the blank.**

Weather is constantly **changing**. It is measured using different instruments.

A **meteorologist** forecasts or predicts the weather using data collected from these instruments. Air moves from **high**(**H**) to **low**(**L**) pressure creating **winds**.

**Match with the correct word/picture pair.**

|  |  |  |
| --- | --- | --- |
| An **anemometer** measures wind speed. |  | barometer |
| A **thermometer** measures temperature. |
|  | rain gauge |
| A **barometer** measures air pressure. |
|  | wind vane |
| A **wind vane**  measures wind direction. |
|  | thermometer |
| A  **rain gauge** measures amount of precipitation. |
|  | anemometer |
|  |

**Complete the tree map on clouds. Cloud Types**

**cirrus cumulus stratus nimbus**

thin puffy flat joins other clouds

**Precipitation**

**Cumulonimbus = thunderstorms**

**gray**

**Gray sheet**

**Fog/low**

**drizzle**

**White, fluffy**

**“cotton”**

**Nice/fair weather**

**Wisp of hair**

**Ice crystals**

**High in sky**

    

**Complete the Water Cycle flow map.**



**Condensation**

water cools off and sticks together to form clouds

**precipitation**

 a cloud becomes saturated and it must let the water go, temperature determines the type





**evaporation**

water is heated and forms water vapor (water is in gas form)

Runoff

**collection**

water runs-off of landforms or seeps through the ground, into streams, rivers, lakes, oceans



**Fill in the blank.**

The **sun**’s energy is the driving force of the water cycle.

**Transpiration** is the evaporation of water that has come through the leaves of plants.

Fronts are boundaries between 2 **air**  **masses** different temperature.

When these air masses have different temperatures and cause a front, **thunderstorms** often occur.





Cold fronts occur when **cold** air replaces warmer air and often

Produce **severe weather** .

Warm fronts occur when **warm** air replaces cooler air and often brings fog.

**Using the weather map, answer the questions.**

What area is currently in a Low pressure system?

**Midwest of US, west of Canada, East in Mexico, Gulf of Mexico**

What area is getting the most precipitation?

**West of NC and up through Canada, above Great Lakes**

Why is there a cold front at the leading edge of the rain moving into North Carolina?

**Because a cold front brings storms where the cold air takes place of warm air**

**Causes convection—big temperature difference**