

Name: _____

Weather Notes



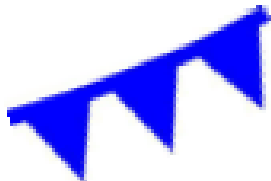
Weather & Climate

- Weather: **What the air around us is like at certain period in time.**
 - Example: Rain, snow, sleet, hail, sunshine
- Climate: **The pattern of weather in a certain place over a long period of time.**

Air Masses & Fronts

- Air mass: **A large body of air with the same temperature and moisture.**
- Front: **When a two air masses meet, and a weather change occurs.**
 1. Warm Front:
 - **When a warm air mass stretches over a cold air mass.**
 - **Light steady rain or snow occurs for longer periods of time.**
 2. Cold Front:
 - **When a cold air mass pushes up and under a warm air mass**
 - **Heavy rain, thunderstorms, or snow occur for short periods of time.**

Cold Front – Blue with
Triangles



Warm Front – Red with Half Circles



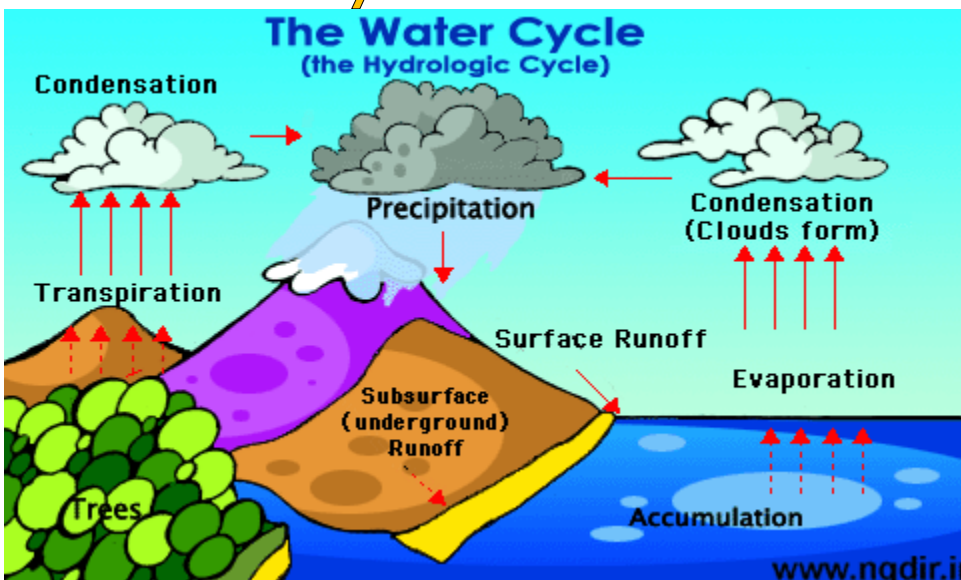
Tools for Measuring Weather

- Meteorologists use weather tools to: **measure and predict the weather to prepare citizens.**
- Anemometer: **Measures the speed of the wind.**
- Hygrometer: **Measures the amount of humidity in the air.**
 - **Humidity: The amount of water vapor in the air.**
- Rain Gauge: **Measures the amount of rain that has fallen.**
- Thermometer: **Measures the temperature of the air.**
- Barometer: **Measures air pressure.**
- Weather Vane: **Measures the direction the wind is blowing.**

Types of Clouds

Cloud Description	Cloud
Flat and gray clouds that are low in the sky and usually mean light rain or snow	stratus
Fluffy, white clouds that are low in the sky and usually mean fair weather	Cumulus
wispy or feathery clouds that are high in the sky and often mean good weather or a change in the weather	Cirrus

The Water Cycle



Evaporation: Heat from the Sun causes water on Earth (in oceans, lakes etc) to evaporate (turn from liquid into gas) and rise into the sky. This water vapor collects in the sky in the form of [clouds](#).

Condensation: As water vapor in the clouds cools down it becomes water again, this process is called condensation.

Precipitation: Water falls from the sky in the form of rain, snow, hail, or sleet, this process is called precipitation.

Collection: Oceans and lakes collect water that has fallen. Water evaporates into the sky again and the cycle continues.