**Chapter 2 – Sect 1 Vocabulary (Water in the Air)**

1. **weather** – the short-term state of the atmosphere, including temperature, humidity, precipitation, wind, and visibility in a specific location.
2. **Evaporation** – liquid water changes into water vapor (gas)
3. **Condensation** - water vapor cools and changes state from a gas to a liquid. CLOUDS form by this process.
4. **Precipitation** – any form of water (rain, snow, sleet, or hail) that falls toward the Earth’s surface from clouds
5. **Runoff** – water, usually from precipitation, that flows across land and collects in rivers, streams, and eventually the ocean
6. **Humidity** – the amount of water vapor in the air
7. **Relative humidity** – the ***RATIO*** of the amount of water vapor in the air to the maximum amount of water vapor the air can hold at a set temperature.
8. **Saturated air** – when the air is holding all of the water that it can at a given temperature (relative humidity is 100%)
9. **Psychrometer** – an instrument used to measure relative humidity
10. **Dew point** – the temperature at which a gas condenses into a liquid
11. **Cloud** – a collection of small water droplets or ice crystals suspended in the air. They form when the air is cooled and condensation occurs.
12. **Cumulus clouds** – white, puffy clouds that tend to have flat bottoms.

* Form when warm air rises
* Generally indicate fair weather
* If they get large enough, they produce thunderstorms

1. **Cumulonimbus clouds** – large cumulus clouds that produce thunderstorms
2. ***-nimbus*** or ***nimbo-*** *-* clouds with those prefixes/suffixes mean they’re likely to produce precipitation
3. **Stratus clouds** – layered clouds that cover large areas of the sky

* Form by the gentle lifting of a large body of air
* Often block out the sun

1. **Nimbostratus clouds** – dark layered clouds that usually produce light to heavy, continuous rain
2. **Fog** – stratus cloud that has formed near the ground
3. **Cirrus clouds** – thin, feathery, white clouds found at high altitudes

* Form when wind is strong
* When thicker, they often indicate a change in coming weather

1. ***Cirro-*** – prefix used to describe clouds at high altitudes (e.g. *cirrocumulus cloud*)
2. ***Alto-*** - prefix used to describe clouds at middle altitudes (e.g. *altocumulus*)
3. **Rain** – the most common form of precipitation. Water drops that became about 100 times their original size fall from a cloud.
4. **Sleet** – forms when rain falls through a layer of freezing air. It is actually falling ice.
5. **Snow** – forms when air temperature is so cold that water VAPOR changes directly into a solid. Single ice crystals can fall or ice crystals can join others before coming down to Earth.
6. **Hail** – balls or lumps of ice that fall from clouds. Updrafts of air in a cloud can form more layers of ice. When the lump becomes too heavy for an updraft to push it up, it falls to Earth.