**The Water Cycle and Clouds**

7.E.1.2 Explain how the cycling of water in and out of the atmosphere and atmospheric conditions relate to the weather patterns on Earth.

**Essential Questions:**

* How does water cycle through the Earth and the atmosphere?
* What conditions in the atmosphere lead to different types of precipitation?

**Vocabulary:**

**Condensation** - water changes from vapor to water gas to liquid by losing energy

**Evaporation** - water changes to vapor liquid to gas by adding energy

**Precipitation** (rain,sleet,freezing rain,snow) - large drops of water fall to earth.  Can be frozen or liquid.

**Transpiration** - water evaporates from leaves during photosynthesis

**Runoff** - water that flows across surface of earth

**Infiltration** - water moves into the soil, used by plants

**Cirrus**- Cloud type that appears feathery or wispy, “curl of hair”, form in very high altitudes and made of ice crystals

**Stratus** - Cloud type that forms in flat layers when air cools over a large area, “spread out”, tend to produce steady, light precipitation

**Cumulus** - Cloud type that appears as puffy masses and often look like cotton balls, “heap” or “pile”, usually appear in the daytime in fair weather but if they keep growing taller can produce rain showers and thunderstorms

**Nimbus** - Clouds that produce precipitation; example: stratonimbus or cumulonimbus

**Cumulonimbus** - thunderstorm cloud, very tall, bring violent storms

**Humidity** - amount of water vapor in the air

**Relative Humidity** - amount of actual vapor in the air compared to how much could be in the air

**Saturation** - humidity is 100% evaporation = condensation

**Dew Point** - temperature that saturation happens

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