Name:

Weather
Study Guide

5.E.1 Understand weather patterns and phenomena, making connections to the weather in a particular place & time.

5.P.2 Understand interactions of matter and energy and the changes that occur.

5.P.3 Explain how the properties of some materials change from heating and cooling.

What You Need to Know…

* Weather can change daily.
* Many factors measured to describe & predict weather conditions… LIKE:
	+ Wind speed and direction, Precipitation, Temperature
	+ Air pressure
* Different (sometimes opposite) seasonal weather patterns in different latitudes and hemispheres. Summer in NC, USA, winter in Kenya, Africa.
* Basic weather instruments LIKE:
	+ Thermometer 🡪 Temperature
	+ Barometer 🡪 Atmospheric pressure
	+ Anemometer 🡪 Wind speed
	+ Wind vane 🡪 Wind direction
	+ Rain gauge 🡪 Precipitation
	(AKA udometer, pluviometer, ombrometer)
* Presence and types of clouds: stratus, cirrus, cumulus
* Warm and Cold Fronts
* Local weather conditions influenced by global air & water currents.
* Jet stream, Gulf stream, El Niño
* Hurricanes are shorts storms that form over WARM ocean water; caused by global weather patterns.
* The sun is the source of all energy. The sun’s energy fuels the Water Cycle (evaporation, transpiration, condensation, precipitation).
* When warm & cool objects come together, warm objects lose heat & cool objects gain it until they are the same temp. (touching or at a distance)!
* HEAT TRANSFER 🡪 Conduction, Convection, Radiation!
* Convection moves heat around Earth and influences weather & climate
* Conductors vs. Insulators

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