

Vocabulary: Unit 10: Meteorology, Part 2: Weather and Climate

weather	The conditions of the lower atmosphere at a specific location and time.
climate	The long-term average of the weather of a specific location.
humidity	Amount of water vapor in the air.
relative humidity	Amount of water vapor in the air relative to the maximum amount of vapor that the air could contain at that temperature.
heat index	What the temperature feels like, taking into account the humidity.
dew point	Temperature at which air is saturated with water vapor at 100% humidity.
cloud	A visible mass of condensed water vapor floating in the atmosphere.
condensation nuclei	Small particles on which water can condense and form water droplets.
fog	Clouds that form near the ground as humid air reaches its dew point.
air mass	A body of air with uniform temperature and humidity.
front	The boundary where two air masses meet.
stationary front	A boundary between two different air masses, neither of which is strong enough to replace the other, marked by lingering winds and precipitation.
cold front	The boundary of an advancing mass of cold air, marked by adverse weather.
warm front	The boundary of an advancing mass of warm air, generally marked by fair weather.
occluded front	The boundary where a warm or cold air mass catches up with another air mass, marked by fierce weather.
thunderstorm	A storm with thunder and lightning and typically also heavy rain or hail.
adiabatic cooling	When a gas expands, its pressure and temperature both decrease without the gain or loss of heat.
tornado	A violent and destructive storm in which powerful winds move around a central point.
cyclone	A system of winds rotating inward to an area of low atmospheric pressure.
anticyclone	A weather system with high atmospheric pressure at its center, around which air slowly circulates.
hurricane	A severe tropical cyclone having winds greater than 74 miles per hour (119 kilometers per hour).
thermometer	An instrument for measuring and indicating temperature.
barometer	An instrument measuring atmospheric pressure.
weather station	An observation post where weather conditions and meteorological data are observed and recorded.
radar	Radio Detection and Ranging; a system for detecting the presence, direction, distance, and speed of aircraft, ships, and other objects, by sending out pulses of high-frequency electromagnetic waves that are reflected off the object back to the source.
isotherms	Weather map lines connecting areas of equal temperature.
isobars	Weather map lines connecting areas of equal air pressure.
isotachs	Weather map lines connecting areas of equal wind speed.
climate zones	Divisions of the Earth's climates into general climate zones according to average temperatures and average rainfall.
biome	A specific environment that's home to living things suited for that place and climate.
microclimate	When climate conditions in a small area differ from those of the surrounding climate.