Unit Learner Outcomes

- Students will measure wind speed and direction.
- Students will identify the heating and cooling of air results in movement of air.
- Students will recognize a variety of instruments that measure wind speed, direction, and temperature.
- Students will construct instruments to measure wind speed and direction.
- Students will distinguish different types of weather events related to wind such as hurricanes and tornadoes.
- Students will produce experiments that illustrate that air has weight and takes up space.
- Students will gather data on wind speed and direction, plot the data, and interpret patterns.
- Students will comprehend the physical properties of water that include solid, liquid, and water vapor.
- Students will distinguish water present in air as clouds, steam, fog, rain, ice, snow, sleet, or hail.
- Students will explore concepts of condensation and evaporation through experimentation and observation.
- Students will identify cloud formation and types of clouds as they relate to weather, storm fronts, and changing weather.
- Students will analyze the effects of water contamination and pollution through precipitation, evaporation, and condensation.
- Students will differentiate the effects of energy change on weather. Heating and cooling of water, air, and land and its affect on wind, evaporation, condensation, freezing, thawing, and precipitation will all be considered through experimentation.

Students will demonstrate the documentation of weather patterns and fronts by applying measurements of temperature, air pressure, wind speed and direction, and precipitation.