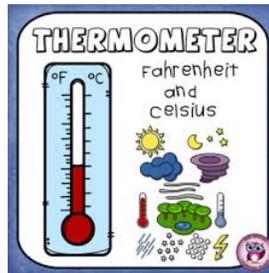


GYSTC Activity



Title: Weather

<p>Purpose:</p>	<p>Students will explore and learn how to read a thermometer, while measuring different substances.</p>
<p>Standard:</p>	<p>S4E4 Students will analyze weather charts/maps and collect weather data to predict weather events and infer patterns and seasonal changes.</p> <p>a. Identify weather instruments and explain how each is used in gathering weather data and making forecasts (thermometer, rain gauge, barometer, wind vane, anemometer).</p> <p>b. Using a weather map, identify the fronts, temperature, and precipitation and use the information to interpret the weather conditions.</p> <p>c. Use observations and records of weather conditions to predict weather patterns throughout the year.</p> <p>S1E1. Obtain, evaluate, and communicate weather data to identify weather patterns. a. Represent data in tables and/or graphs to identify and describe different types of weather and the characteristics of each type. b. Ask questions to identify forms of precipitation such as rain, snow, sleet, and hailstones as either solid (ice) or liquid (water). c. Plan and carry out investigations on current weather conditions by observing, measuring with simple weather instruments (thermometer, wind vane, rain gauge), and recording weather data (temperature, precipitation, sky conditions, and weather events) in a periodic journal, on a calendar, and graphically. d. Analyze data to identify seasonal patterns of change. (Clarification statement: Examples could include temperature, rainfall/snowfall, and changes</p>
<p>Materials:</p>	<ul style="list-style-type: none"> ● Beakers ● Thermometers ● Play-Doh ● Light Bulbs of various colors ● Water

<p>Procedures:</p>	<ol style="list-style-type: none"> 1. Set up six measurements to be in a row for easy measurement. 2. Fill the three beakers with cold, room-temperature, and hot water with a thermometer in each beaker 3. Place a Thermometer in the Play-Doh 4. Place one Thermometer near the light bulb stand and switch out colors periodically so students can measure the temperature of air above the light bulbs and see which color warms the air more. 5. Place one Thermometer on the table to measure the temperature of the room 6. Allow each student to read each of the Thermometers in order to learn and practice how to read a Thermometer.
<p>Science Behind It:</p>	<p>A thermometer is usually made up of a small, hollow glass tube. At the bottom of the tube is a bulb, which holds a liquid such as alcohol or mercury. When there is an increase in heat, the liquid inside the bulb expands, pushing up into the tube. A decrease in heat lets the liquid contract, moving down the tube.</p>
<p>Questions to Ask:</p>	<ol style="list-style-type: none"> 1. Which color light bulb made the air the warmest? 2. How does a thermometer measure temperature? 3. What are the scientific or non-scientific uses for a thermometer?