

**Project FOCUS
Best Lessons
FIRST GRADE**

Title of Lesson: Understanding Temperature and Thermometers

Theme: Earth/Space Science

Unit Number: 1 Unit Title: Weather and the Seasons

Performance Standard(s) Covered (enter code):

S1E1

S1CS3

S1CS2

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Temperature, using a thermometer, seasons

Learning Activity (Description in Steps)

Abstract(limit 100 characters): This activity helps the kids to understand the use of thermometers by creating a thermometer.

Details: We began the lesson by discussing the seasons and how they felt different. Then we moved into the importance of having a definitive measurement of temperature and from there we began the lesson on thermometers. I showed the kids different thermometers I used around the house and we talked about other places for thermometers, such as the engine thermometer in a car. Then we talked about distinctive temperatures, such as when water freezes, what normal body temperature is, and what a fever is. For the activity each child was given a thermometer outline, one strand of white and red yarn, and crayons for coloring. The kids basically colored in their thermometers and threaded the string through. This also helped the kids identify the parts of a thermometer, such as the increments of measurement and the units of measurement. When the kids were done making and labeling their thermometers we wrapped up the lesson by me calling out temperatures and them setting their thermometers or me setting my thermometer and them telling me the temperature. We also mixed it up a bit by me asking what temperature it would be outside if I was in a bathing suit or if I was wearing mittens. This helped to bring the lesson together with the seasons.

Possible Questions:

- 1) How should you hold a thermometer so you don't affect the temperature it is showing?
- 2) Where should you place a thermometer outside to get an accurate temperature reading?
- 3) Where else can you find thermometers besides outdoors?
- 4) What temperature would it be in July? January? What would you wear?
- 5) At what temperature can you make ice?
- 6) What temperature would you have if your mom told you that you had a fever?

Materials Needed (Type and Quantity):

- thermometer outline drawn on card stock
- 10 inch red yarn strands tied at one end to 10 inch white yarn strands
- crayons
- Multiple thermometer types found in the science trailer and around my apartment (mercury, digital, round, small, outdoor, etc.)

Notes and Tips (suggested changes, alternative methods, cautions):

The only preparation needed was to draw out the thermometer shape onto the card stock and I labeled increments of 10 up to 100 for the temperature. Holes were punched at the bottom of the thermometer and at the top. I left a box at the bottom of the page for kids to write in the unit of measurement (°F), which I emphasized in the classroom. I also cut the yarn and tied the white to the red at one end. To help the kids understand the project I made a sample thermometer to show them. In the classroom we reviewed the uses of thermometers, where thermometers are, normal body temperature, and freezing temperature. We also talked about what temperatures are typical in the seasons where we live.

Sources/References:

- 1)
- 2)
- 3)