

Measuring Temperatures Using Two States of Water: Elementary Lesson Plan

Objectives	Given a thermometer, students will measure the temperature of various substances around the classroom with 100% accuracy.
Standards	STEM Discipline-Science, IN Academic Standard(s)-K.1, K.6, 1.1
Materials	<ul style="list-style-type: none"> -1 thermometer per student -1 notebook and pencil per student -hot plate, to boil water -various bottles of water that have been frozen or kept at room temperature -cup of tap water -cup of recently boiled water -280Slides presentation on the computer, being projected to the class
Procedure	<ol style="list-style-type: none"> 1. The teacher will explain to the class how to measure the temperature of a substance (in this case, water) using a standard Fahrenheit thermometer. The teacher will present this information using 280Slides, where a video can be incorporated to help demonstrate the process. 2. Students will measure the temperature of water inside of a bottle of water, water from the tap, water that has recently been boiled on a hot plate, and water that has been in a freezer. 3. Students will record their measurements in their notebook. 4. Teacher will then lead discussion with the following questions: <ul style="list-style-type: none"> -Why do we measure temperatures of things? -Where, on TV or at home or outside, do you see temperature measurements? -What temperature do you think is really cold? What temperature is really hot? What temperature is just right? 5. Assign the following homework <ul style="list-style-type: none"> -Go home and measure the temperature of three more things with your thermometer. Write them down in your notebook. If you need help, ask your parents to help you boil something or heat something up.
Evaluation	The teacher will look at the students' notebooks and match their responses to a set of already measured responses recorded by the teacher. The teacher will allow a 5-10 degree margin of error.

can