A Fine Day for...

**Reporting Category**  Measurement
**Topic**  Measuring Celsius and Fahrenheit temperatures
**Primary SOL**  2.14 The student will read the temperature on a Celsius and/or Fahrenheit thermometer to the nearest 10 degrees.

**Related SOL**  2.4

**Materials**
- Story about weather and/or temperature
- Large thermometer for display
- Thermometers with Celsius and Fahrenheit scales for student use
- Temperatures Today sheet (attached)
- A Fine Day for ________ sheet (attached)

**Vocabulary**
thermometer, Fahrenheit, Celsius, temperature

**Student/Teacher Actions (what students and teachers should be doing to facilitate learning)**
1. Begin by reading aloud a story about weather and/or temperature.
2. Pose the question: “What tools might we use to measure the weather?” Responses may include a rain gauge, barometer, thermometer, and ruler. Explain that today we are going to be measuring temperatures, using thermometers.
3. Display a large thermometer. Have each student write some observations about the thermometer and share his/her observations with another student. Have students share their observations with the class. Observations should include the two different scales—Celsius and Fahrenheit—the scale markings that indicate counting by twos, and the recording of the 10s on the scale.
4. Demonstrate how to read the current temperature in Fahrenheit on the thermometer, using counting by tens and twos. Call on student volunteers to read other Fahrenheit temperatures. Explain that not all countries use Fahrenheit, just like not all countries use inches. Model reading the current temperature in Celsius on the thermometer. Call on student volunteers to read other Celsius temperatures.
5. Give each student a copy of the Temperatures Today sheet and a thermometer. Have students bring their sheets, thermometers, and pencils outside, find different locations on the playground that might have different temperatures (e.g., in the shade, under the slide, out on the blacktop, beside the wall of the school), sit down, and place the thermometer on the ground. After the thermometers have been on the ground for a few minutes, have student read and record the temperatures on the Temperatures Today sheets. Have them also complete the other items on the sheet (e.g., 90°F means it might be a fine day to go swimming).
6. Once the class is back inside, take five minutes to ask whether students had any concerns or problems during the temperature activity. Select a few students to share their temperature readings, and record the temperatures on the board. Ask students to make a generalization about the weather outside today, based on the temperatures (e.g., “It is really hot,” or, “It seems like temperatures in the shade are cooler.”).

7. Distribute copies of the A Fine Day for _________ sheet, and explain that students will now read and record four different temperatures and then think of an activity that they might like to do outside on a day with each temperature.

8. As students work on the activity, circulate around the room. Ask students to model skip counting by tens and twos to read the temperature.

Assessment
• Questions
  o Why do you think the thermometers have numbers that count by tens? Would it be easier or harder to read the temperature if the numbers counted by twos? Why?
• Journal/Writing Prompts
  o My friend in Germany called to tell me that it was 10 degrees this morning when she woke up. I went to the thermometer and measured that it was 50 degrees here. Do you think that the weather in Germany is about the same as it is here or that it is very different? Why?
  o If 90 degrees Fahrenheit is hot and 40 degrees Fahrenheit is cold, what do you think would be a good Fahrenheit temperature to have inside a house for it to feel “just right”?
• Other
  o Use the A Fine Day for _________ sheet as written assessment.

Extensions and Connections (for all students)
• Have students record temperatures over a one-week or one-month period and then graph the trends.
• Have students measure and record temperatures in other classrooms in the school. Guide them in making generalizations, using these data.

Strategies for Differentiation
• Have students draw a line from the top of each thermometer reading to the temperature number.
• Have students use moveable thermometer manipulatives to show various temperatures.
• Have students make their own paper thermometer and fill in the scale marks, using skip counting by twos and tens.
Temperatures Today

Name _________________________________

After your thermometer has been on the ground for a few minutes, read the temperature, and record it on the thermometer below by drawing exactly what it looks like.

Where are you sitting in order to measure the temperature?

________________________________________

What is the temperature on the ground where you are?

_________ Celsius

_________ Fahrenheit

Because of this temperature, it is a fine day for ____________

________________________________________

________________________________________

This is a picture of what the temperature feels like today:

[Blank Thermometer Image]
A Fine Day for ________

Name _________________________________

Temperature _______ ° F

Temperature _______ ° C

Temperature _______ ° C

Temperature _______ ° F

It is a fine day for _______________________
________________________________________________________________________________
________________________________________________________________________________

It is a fine day for _______________________
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It is a fine day for _______________________
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It is a fine day for _______________________
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