Lesson Topic	What is the temperature? Hot and Cold Temperatures	Date	Monday, January 10, 2022
Subject/Grade	Grade 2	Time	2:25-3:10
Level	Science		45 min

Outcomes from Alberta Program of Studies		
General Learning Outcomes	<b>2–9</b> Recognize the effects of heating and cooling and identify methods for heating and cooling.	
Specific Learning Outcomes	SLE 2: Measure temperature in degrees Celsius (°C).	

# Learning Objectives

Students will know: How to read and display the temperature on a thermometer.

Students will be able to: Read and illustrate a temperature from a thermometer.

Prior to the lesson I need to:	Materials/ Equipment and Resources
Make Anchor Chart of Hot and Cold Temperature	Hot and Cold Student Booklet (print 23 copies) Interactive Thermometer The Thermometer Poster
Make copies of student Hot and Cold Booklet	The Thermometer Timeline Poster Green Duotang

Time	Introduction	
10-15 min	<ul> <li>Ask students if they know how cold it is outside?         <ul> <li>Have students follow to the door near the classroom</li> <li>Have students watch as I stand outside for 1 min</li> <li>Come inside and show the thermometer to the students</li> <li>Read the temperature to tell students how cold it is.</li> </ul> </li> <li>Introduce unit with Anchor Chart</li> <li>Introduce the story "50 Below Zero"-Robert Munsch         <ul> <li>Ask students to listen for words that might help us learn more about hot or cold temperatures.</li> </ul> </li> <li>Play Read Aloud of "50 Below Zero"-Robert Munsch <a href="https://www.youtube.com/watch?v=h7fyiahPAB8">https://www.youtube.com/watch?v=h7fyiahPAB8</a> (5:24)</li> <li>Introduce The Thermometer Poster</li> </ul>	

	<ul> <li>Read the poster/poem aloud</li> <li>Display the Thermometer Timeline</li> <li>Go over the different temperatures</li> <li>Review the pattern of 10</li> </ul>
Time	Body (Learning Activities)
25-30 min	<ul> <li>Take 5-10 minutes to practice using an interactive thermometer (on board)         <ul> <li>Have every student try with a new temperature (in Celsius)</li> </ul> </li> <li>Have students put Hot and Cold booklet into green duotang</li> <li>Share instructions with students for "what is the temperature" (pg.1) and "Illustrate the Temperature" (pg. 2)         <ul> <li>Have students use a red pencil crayon to illustrate the different temperatures</li> </ul> </li> <li>Send students to complete the two pages.</li> <li>Give 5 min reminders of the time countdown.</li> </ul>
Time	Closure
10 min	<ul> <li>Have students return to their desks.</li> <li>Review the first page, having students share their answers         <ul> <li>Ask them to explain how they found out the temperature</li> </ul> </li> <li>Write on the front board, the definitions for temperature and thermometer         <ul> <li>Ask students first for what they think is the definition of the word.</li> <li>Temperature: How hot or cold it is outside.</li> <li>Thermometer: The tool we use to measure the temperature in degrees celsius</li> </ul> </li> <li>Have students write definitions for temperature and thermometer on the back of their front page</li> </ul>

Sponge Activity	More Practice with interactive thermometer
(Activities)	

#### Assessment:

- Formative Assessment→Observe students as they manipulate the interactive thermometer on the board. Are they able to read the temperature from a thermometer? Are they understanding that hot temperature is higher, cold temperature is lower, are they lining up the number with the top of the temperature line?
- Formative Assessment→Walk around the room as students complete pages of booklet to see if students are correctly identifying and illustrating the temperature. Ask students how they came to this answer.

## Differentiation:

- To help practice the vocabulary and to provide students with a definition to look back on for future review. I plan to have students write a uniform definition of temperature and thermometer to have with them for future reference.
- Review that the thermometer is in patterns of 10. To help students who might struggle with number recognition.

#### Resources:

- Science (elementary) A.1(1996) education | Alberta.ca. education.Alberta.ca. (n.d.). Retrieved January 3, 2022, from <a href="https://education.alberta.ca/media/159711/elemsci.pdf">https://education.alberta.ca/media/159711/elemsci.pdf</a>
- La belle Coccinelle & Let's Talk Teaching. Hot & Cold: A Complete Unit About Temperature (in Celsius).
- Munsch, R. N., & Martchenko, M. (2021). 50 Below zero. Alberta Education.
- Yoyo3641. (2011, March 2). 50 below zero read by Robert Munsch. YouTube. Retrieved January 3, 2022, from <a href="https://www.youtube.com/watch?v=h7fyiahPAB8">https://www.youtube.com/watch?v=h7fyiahPAB8</a>

## Reflection: