

Air and Water Temperature – Indoor Lesson

Grade First Grade (1st)

Lesson Fall Indoor

Time 30 minutes; conducted in the classroom

Materials *Overheads:*

- Unmarked Thermometer sheet (from website)
- Marked Thermometer sheet (from website)

From the Portable:

- Flipbook
- Fahrenheit Thermometer

Other:

- Glass of water

Objective:

To teach students how to take and read air and water temperature to determine if temperatures are suitable for the salmon in our watershed streams.

Lesson:

1. Introduce yourself to the class and let students know that they are going to learn an important skill that will be needed for the next watershed outing. Today we are going to learn to take air and water temperature.
2. *Ask the class: What is temperature?* The measure of how hot or cold something is.
3. *Ask: Why do we take our own temperature?* To see if we are sick.
4. *Ask: How do we measure the temperature of something?* Yes, we use a thermometer. Hold up the thermometer for the students to see. The reason we want to measure the water temperature for a stream is because we want to be sure it is at an optimum temperature for salmon to live in. They like to live in water that is between 45 – 65 degrees Fahrenheit. Hotter or colder could cause the salmon to die.
5. Place the blank thermometer sheet on the document camera covering up the Celsius side.

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- a) Point out to the students how a thermometer is quite small so it is difficult to list every number.
 - b) Show them how some numbers are marked, and how to use them to figure out what the numbers are that aren't marked. For example, count the hatch marks between the 0 and 10.
 - c) *Ask: Who can count by twos for me from 0 to 10?* Good, that is how we have to count to read a thermometer.
6. Let's practice reading a thermometer. Place the marked thermometer sheets on the overhead in the order they are numbered.
- a) Each time give them a minute to try to figure out the temperature, and then ask, *"Who can raise their hand and tell me what this temperature is?"*
 - b) As the sheets get more difficult, be sure to explain how to figure out the temperature.
 - c) Also, note that the higher the red line goes, the hotter the temperature.
7. Now let's learn how to take the air and water temperature. Show the students the thermometer they will be using and tell them they must hold it from the string away from their body because if they touch the bulb end, the warmth from their hands will cause the temperature to rise.
8. Take the air temperature - using the stop watch in the backpack, take the air temperature for three minutes. Then show how you record it in the flipbook.
9. Next, to take the water temperature you gently place the thermometer in the water still holding it by the string. Again, time it for three minutes and read and record the data.
10. Remember, when we go on our outing, there will be parents to help you do this correctly and to help record the data.
11. Remind students of the date of their upcoming outing and to remember to wear a jacket or coat, long pants and boots or old shoes.