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| MEASUREMENT (temperature) | 10.16.2018 |

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| Subject |  | Overview |
| |  | | --- | | Basic Science | | Prepared By | | [Instructor Name] | | Grade Level | | 2 | |  | This lesson plan covers teaching content for;   1. Measuring temperature. |

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| Materials Required - Thermometer  - Small Poster Boards (for vocabulary words)  - Paper  - Construction Paper  - Ruler  -Scissors  -Markers  -Pencils  -Water  -Ice cubes  -Cups |
| Additional Resources  * <file:///C:/Users/Maria/Downloads/ICanStatementsforHotColdTemperatureUnit.pdf> * <https://www.tes.com/teaching-resource/measuring-the-temperature-6054835> * <https://study.com/academy/lesson/temperature-lesson-plan.html> * <http://www.weatherwizkids.com/weather-temperature.htm> * <http://teacher.scholastic.com/lessonrepro/lessonplans/profbooks/todaytemp.htm> * <https://prezi.com/dlvuhxbkvgoi/grade-1-measuring-temperature/?webgl=0> |
| Additional Notes |

|  |  | Teacher Guide |  | Guided Practice |
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| **Objectives** Students will be able to:   1. Define temperature. 2. Define thermometer. 3. Identify common uses for measuring temperature. 4. Take temperature measurements in various places of the school.  Information/Instruction  1. Review with students that temperature tells how hot or cold something is. 2. We can use a thermometer to measure the temperature. 3. In some thermometers, a special liquid rises and falls as it gets hotter or cooler. 4. The hotter the temperature, the higher the liquid climbs up the thermometer. 5. The lower the temperature, the lower it goes down the thermometer. |  | **Day 1/Lesson 1- 15 Mins**   1. Teach students to recognize hot and cold temperatures on a thermometer. 2. Draw a picture of two thermometers on a white board or chalkboard. 3. Have one thermometer show less than 32 degrees Fahrenheit, and the other 80 F or higher. 4. Explain that the hotter the temperature, the higher the number. 5. Point to the "cold" thermometer and discuss what you would do if the outdoor temperatures are below 32 F. 6. Do the same with the "hot" thermometer. |  | **Day 2/Lesson 2- 25 mins**   1. Draw the shape of a thermometer on a white piece of construction paper. 2. Make it 10 inches tall and 3 inches wide. The bottom part should be slightly round. Cut a slit just above the rounded bottom. 3. Cut a strip of red construction paper. Make the strips 8 inches tall and 1 inch wide. 4. Tell students that the red strip represents the mercury inside their thermometer. 5. Insert the strip through the slit at the bottom of the thermometer; then pull the red construction paper strip to the slit at the top of the thermometer; and connect the two ends. Make sure it is long enough. 6. Label the thermometer. Make eight marks on each side of the thermometer. 7. Place an F---for Fahrenheit---on the top left, and a C---for Celsius---on the top right. 8. Add degrees, starting at -40 degrees F on the left side and progressing upward in rises of 20 degrees. 9. Start at -40 C on the right side and progress upward in rises of 10 degrees. 10. Ask the students to display different numbers on the thermometer by moving their strips up and down. 11. Tell them to use the blue strip if you mention a temperature that is cold. 12. Tell them to use the red strip if you mention a temperature that is hot. |
| 1. You may want to present students with a few thermometers, both digital and analog, to study and experiment with. |  | **Day 3/Lesson 3- 25 Mins**   1. Divide students into small groups and give each group a thermometer and a cup of warm water. 2. Have students measure the water’s temperature. 3. Challenge them to get the water to room temperature, about 70°F or 21°C. 4. They may want to add cold water, drop in an ice cube, or even blow air on the water to cool it down. 5. If they make it too cold, how will they warm the water up? 6. You may wish to time the groups for added friendly competition. 7. The first group to cool down their water to the temperature can select another temperature and have the whole class try the experiment again. |  | **Day 4/Lesson 4- 15 Mins**   1. Group the students into four 4 groups. 2. Have small group of students use thermometers to measure the temperature outside. 3. You may wish to have students begin a long-term project of measuring the weather outside and recording their observations. 4. Be sure that students take the temperature outside around the same time each day. 5. Encourage your students to become weather experts!   **Day 5/Lesson 5- 15 Mins**   1. Begin the lesson by having students OBSERVE a thermometer with a partner. 2. In a notebook have students describe, draw, and label everything they notice. 3. Discuss together how a thermometer is used and how it works. 4. Using an overhead thermometer or Smart board tool thermometer, have students practice reading temperature in both Fahrenheit and Celsius. 5. Next have student pairs write 3-4 investigable questions using the sentence prompt: How does the temperature of \_\_\_\_\_\_\_\_\_\_\_\_\_ compare to the temperature of \_\_\_\_\_\_\_\_\_\_\_\_\_? 6. Sentences can be written in science notebook. 7. Have groups of students share their investigable questions with the class to help groups who are short on ideas. 8. Examples: “**How does the temperature in our room compare to the temperature outside. How does the temperature of my hand compare to the temperature of my friend's hand? How does the temperature in the shade compare to the temperature in the sun?** 9. Instruct students to carry out their investigations. Remind them that scientist often gather their data and chart it in some manner. 10. All information should be documented in science notebook. |
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| Assessment Activity . |  | Assessment Activity |  |  |
| Summary |  |  |  |  |