

HBCSD TECHNOLOGY LESSON PLAN

3rd GRADE (Lesson 3)

Grade Level - 3

Lesson Title - Take, Record, and Analyze Liquid Temperatures

Standards

Common Core:

[MP.5](#) - Use appropriate tools strategically. (3-PS2-1)

[3.MD.B.3](#) - Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.

Solve one- and two-step “how many more” and “how many less” problems using information presented in bar graphs. (3-ESS2-1)

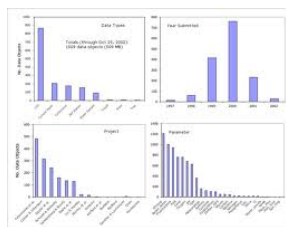
[W.3.9](#) - Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. (3-ESS2-2)

Technology Competencies:

- Use digital instruments and measurement devices (e.g. thermometers, scales, heart rate monitors, microscopes)
- Create/Use databases to analyze information
- Create a graph using data (e.g. Excel, Google Docs,)
- Create, format and use a spreadsheet to analyze data (Excel)

Purpose

Students will learn to use digital thermometers, record information, and analyze data. Students will then create graphs to represent their data.



Resources

Science Text

Math Text

- <http://nces.ed.gov/nceskids/createagraph/>

- <http://nces.ed.gov/nceskids/graphing/classic/bar.asp>

- <http://www.mathsisfun.com/data/bar-graph.html>

Supplies

- Digital Thermometers
- working computers with Internet access
- various liquids
- containers

Direct Instruction

1. After learning about solids/liquids/and gasses, students will learn that liquids have different temperatures.
2. Give lesson on how to read thermometers and digital thermometers. Have students use digital thermometers to collect data.
3. After data is collected and recorded, have students transfer their data into graphing program such as

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Excel or a bar graph maker such as one of the websites listed above in the resources.

4. Graphs may be printed or displayed on an online web page.

Guided Practice

1. Have students take turns measuring the temperature of liquids under the document camera to make sure all students understand how to use the digital thermometers.

Differentiated Instruction

EL - Students may be placed in partner groups to read thermometers and create bar graphs.

GATE- Students may play around with the bar graph maker to enhance their graph with the many different features. Students may also create different types of graphs, or graph another topic of choice.

Assessment

Teacher will assess students' graphs for completeness and accuracy.