

UW-Platteville SoE Lesson Planning Template

Name: Bryanna Walz
Lesson Title: Customary Units of Length
Grade level(s)/Course: Third Grade/ Math
Date taught: December 2 – 3, 2013

INFORMATION ABOUT STUDENTS AND THEIR LEARNING NEEDS

Total students 17 **Males** 10 **Females** 7

INFORMATION ABOUT THE LESSON

Content Strand

- Math

Enduring Understanding and/or Essential Question

- What are the multiplication facts for 6s, 7s, and 8s?
- What are some types of units of measurement?
- What is the width or length of a given object?

GLE(s) or EOC and Symbolic Notation

Mathematical Practice

- CC.K-12.MP.3 Construct viable arguments and critique the reasoning of others.
- CC.K-12.MP.5 Use appropriate tools strategically.
- CC.K-12.MP.6 Attend to precision.
- CC.K-12.MP.8 Look for and express regularity in repeated reasoning.

Mathematical Content

- CC.3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units-whole numbers, halves, or quarters.

Outcome(s)

- The students will be able to measure with nonstandard and standard units.
- The students will be able to measure and draw line segments to nearest inch, half inch, and fourth inch.
- The students will be able to measure lengths to nearest fourth inch and show data on a line plot.

Academic Language related to the lesson

- inch (in.)
- foot (ft)
- ruler
- line segment

Prior Learning/Prior Thinking

- This is the first lesson for the unit on Measurement, Time, and Graphs.

LESSON IMPLEMENTATION**Anticipatory Set/Elicit Prior Knowledge****Quick Practice**

- Using product cards the students will work individually and sort the product cards into piles based on what multiplication facts they can do fast, slow, and don't know. Then the students will have a few minutes to practice the product cards in their slow and don't know piles. For those that know all of their facts they can help partners check that piles are sorted correctly and help with practicing.
- Have the student leader lead the class with practicing their 6s, 7s, and 8s multiplication facts. The student leader will go around the room and have each student say the answer to the multiplication fact the student leader says.

Anytime Problem

- When the students come in have the following problem up on the smart board to have them figure out the answer on their own.
- True or False:
 - If you multiply two even numbers, the product will be even.
 - If you multiply an odd and an even number, the product will be odd.
 - If you multiply two odd numbers, the product will be odd.

Focus/Purpose Statement

- The students will measure length in inches, half inches, and quarter inches with rulers.

Procedures**Units of Measurement**

- Divide students into small groups of 3 or 4. Give each group a pencil. Each group's pencil should be a different length. Draw the table on the board to record each group's estimate of the width of a desk in pencil lengths to record the estimate of desk width (pencil length), actual desk width (pencil length), and desk width (inches).
- Discuss units and tools of measurement and record them on the board. Think about what kinds of measurements that can be taken from a truck and what tool might be used for each of the measurements.
- From that list make a chart dividing measurements into units based on length, weight, liquid volume, and time. Have the students think of other types of units of measurement to fill in the chart.

Measure and Draw Line Segments

- Assemble rulers.
- Have students use their rulers to do activity workbook page 159 as a class.
- Then have the students first estimate problems 7 through 9 on page 160. As a class measure the line segments for problems 7 through 9 and have the students finish the page individually including problem 13 since those measurements will be needed for another activity workbook page.

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Introduce Line Plots with Fractions

- Discuss all the parts of the line plot on activity workbook page 161. Have the students finish page 161 in pairs chosen by the teacher. Once all of the students are done with problem 16 have a couple of them share the question they wrote and go over the answers to problems 14 and 15.
- For activity workbook page 162 we will need all of the measurements from problem 13 on page 160. Have the students say the measurement that they got as I write them on the board while the students write the same numbers in the blue box on page 162 in their activity workbook. Using these measurements make a line plot on the ruler as a class so that all of the students understand how to make a line plot on their own for a future lesson. Then answer the last two questions on that page as a class.

Closure

- Play estimate and compare if there is still time before recess. Have the student find a partner and they will work together to find an object in the classroom. Make an estimate of the length and then one of them will measure the object to find the actual measurement to see how had the closest estimate.
- For homework the students will complete the Homework and Remembering worksheets 147 and 149. The students will also need to tear out page 158 in their activity workbook since it is a letter for their parents explaining what this unit will be able and how they can help their child out at home with mathematics.

Materials and Resources

- Student activity workbooks
- Product cards
- Pencils
- Smart board
- Rulers
- Numerous classroom objects to measure

ASSESSMENT

During the lesson

- The students will be assessed on completion of pages 159 through 162 in their activity workbooks.

At the end of the lesson

- The students will be assessed on completion of the Homework and Remembering pages 147-148. If a student does not turn this in he/she will complete it at morning recess.