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Lesson Plan Template

118

Name: [redacted] **Course:** LIMSST **Grade:** 6

Unit: Metrics

Big Idea: Developing Decimals and Metric Measurement

Subconcept: Converting Metric Measure

Literacy Strategy(s): Anticpation Guide, Creative Story Writing, Think-Pair-Share, Journals

Lesson: Converting Metric Measure with all ranges of kilo to milli

Date Taught: September 17-23

Learning Objective(s):

- **Students will be able to convert metric measures from kilo to milli and milli to kilo using the metric chart.**
- **Students will be able to be more familiar with the size of each unit.**

Idaho Standards (or National Standards if no Idaho Standards exist):

6.M.2.1

Detailed Description of Lesson:
Day one give anticipation guide Include the instructions that students are given for activities. Remember that these lessons will be shared with other teachers. Please provide enough detail so that other teachers could replicate the lesson.

The first thing I did was read them the "Hershey's Weights and Measures" book and we discussed each of the measurements and how they applied to different situations in our everyday life. Then I gave them the anticipation guide. It was funny how some of them thought they knew exactly what everything was and then couldn't believe they were wrong. They had been working with metrics in science for about a week, and thought they had it all figured out. After we discussed this, I had them draw out the conversion chart in their notebooks. The next day we did an assignment in the book which covered recognizing the width of a door in metrics, the weight of a paper clip, etc. Then it went into the conversions. I had a chart drawn on the board up front for all of them to use, and so did the science teacher in her room. We did most of this day's assignment together.

The next day I gave them a "Metric Scavenger Hunt" to do with a partner which was used to estimate metric measurements of length. At first they had a hard time estimating, but it did really help them. By the time they finished they were getting much better at recognizing the difference of a centimeter and a meter. Some still wanted to use inches. Their assignment for the day was a WS on converting metric measures.

Friday I had the students write a reflection on metrics of what they had thought metrics were before we started and what the different activities we had done changed their ideas, or how what we had been doing helped them to understand it better than before. Also, I asked them to explain how to convert a number from kilometers to decimeters.

The next Monday we had another review worksheet on converting measures and Tuesday had a quiz. Although my second period class did not as great as I thought they would, the other class did a pretty good job and seemed to understand the concepts of size and conversion much more than my classes from the past.

Handouts:
Include any handouts that students were given.

Student Work:
Include samples of student work from the lesson (include and identify examples of high, medium, and low quality). *Remove student names before submitting.*

Reflection:
Complete the Lesson Reflection Form on the following page.

Name_____

Metrics Anticipation Guide
Pages 106-109
Answer true or false

1. A multiple of 10 is the same as multiplying a number by 10.

2. Ten decameters is the same as 1 meter times ten.

3. To change five kilometers to millimeters you add 1,000 to five to get your answer.

4. When you change meters to millimeters, you move the decimal to the left to get your answer.

5. To change from larger units (kilos) to smaller units (millis), you divide to get the equivalent measure.

6. It is important to use place holders when converting metric measures.

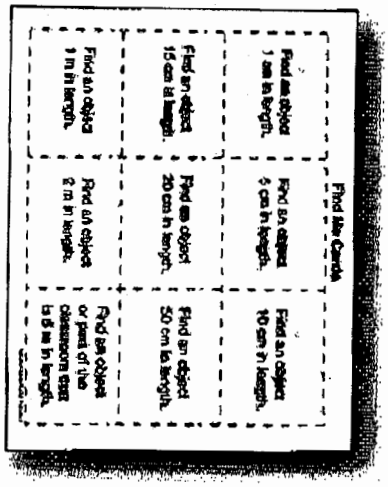
7. Three (3) grams is larger than thirty (30) decigrams.

8. A liter is larger than a milliliter.

Metric Scavenger Hunt

Purpose

To practice estimating metric measurements of length



Materials

- Pencil
- Centimeter ruler and meterstick
- Objects to measure

How to Use

Print the activity sheets for each pair of students.

Have students

- Cut out the Find Me Cards and place them face down in a stack.

Game Rules

- The first player draws a card and tries to find an object with the same length.
- His or her partner measures the object, records its actual length, and finds the difference between the two measurements.
- After recording the measurements in the chart, the second player draws a card.
- The game continues until all cards have been drawn.

Click here to print the activity sheets.

You will need the Adobe Acrobat Reader Plug-in to print these files. If you do not have the plug-in, click the button below to get the free plug-in.

Find Me Cards

Find an object 1 cm in length.	Find an object 5 cm in length.	Find an object 10 cm in length.
Find an object 15 cm in length.	Find an object 20 cm in length.	Find an object 50 cm in length.
Find an object 1 m in length.	Find an object 2 m in length.	Find an object or part of the classroom that is 5 m in length.

Metric Scavenger Hunt

Find an object with this length:	Object	Actual length	Difference

LIMSST Project Literacy Lesson Reflection Form

Name: [redacted] 118 **Date lesson was taught:** 9/17-9/24

Lesson Title/Topic Areas: Converting Metric Measurement

Literacy Strategies Used:

(Please discuss what literacy strategies you embedded in this lesson. What were your goals in using these strategies?)

Read the book "Hershey's Weights and Measures" and discussed the various relationships of candy to the measure. My goal was to give them a visual to refer to for remembering the unit.
Anticipations Guide to spark their interest and to help them see what they already knew and what they still needed to learn.
Journal writing to enforce the concepts they had learned.
Measurement activity to give them another visual of measurement.

Student Response to the Lesson:

(Was the strategy effective? Were students able to read/write as needed in this lesson? What attitudes were displayed? How did specific students and/or the class do? How did the literacy strategy aid in developing student understanding of the topic? Cite specific evidence from the samples of student work)

I felt the various strategies I used this year were very beneficial to the students understanding the metric system. It also really helped to be doing it at the same time as the science teacher. As one student stated in his journal, "It helped me know that metrics are all around us. When we did them in science it was used one way and in math another way but it all meant the same thing." It was fun to watch them do something and see their eyes light up when they realized it was the same thing they were doing in science. The hands on activities always help the most. They need that time to work out the problems and see what is happening. The students' test scores for this chapter were much higher than last year too. I can't say that is all from the way it was taught, because this group seems to care much more than last year, but I know it really helped because of their responses.

Lesson Reflection:

(What worked well with this lesson? What challenges did you encounter in this lesson? Would you change certain aspects of the lesson or the questions that you asked? How does this influence future lesson planning?)

As I stated above, I think one of the main things that worked well was using more visuals. Another thing was, because we were working together with science, I did not rush through it. It seems we are always in a rush to make sure everything is covered, but I did take more time. Another thing I noticed was that my problem class finally started to settle down, because they did want to do the activities. I would like to find some more activities to do, not with just this lesson, but with all of my lessons. The students learn so much more from them.

Relationship to Previous Instruction:

(Have you taught this lesson/topic prior to the LIMSST project? If so, how did your teaching of this lesson differ from what you taught before? How did students' reactions to this lesson differ?)

I have not used this format for teaching metrics, but I definitely will continue to use this and add more to it. Not only did the students respond to this method better, I had much more fun teaching it.