Name: <u>A. Rios</u>

Subject: Mathematics

**Standards addressed:** 1.0 Students understand that measurement is accomplished by identifying a unit of measure, iterating (repeating) that unit, and comparing it to the item to be measured:

1.1 Measure the length of objects by iterating (repeating) a nonstandard or standard unit.

1.2 Use different units to measure the same object and predict whether the measure will be greater or smaller when a different unit is used.

1.3 Measure the length of an object to the nearest inch and/or centimeter.

What are your objectives for this lesson? This lesson is a continuation of the study of estimation and measurement that was introduced through reading a book in a previous lesson.

- Students will learn the differences between estimates and measurement.
- Students will learn measurement terms: Ruler; Inch

#### Success Criteria

- Students will practice and demonstrate estimation and measurement skills, estimating and measuring lengths of actual objects.
- Students will be able to demonstrate their understanding through completing an estimation / measurement chart, and in their response to writing prompts.

#### **Learning Activities:**

- Review of measurement terms from a book read in the previous lesson (teacher instruction, question and answer)
- Whole group read aloud (teacher reads to students)
- Model estimation and measurement
- Guided practice
- Independent practice estimation and measurement
- Completion of worksheet; comparing estimation and actual measurements
  - Writing reflection on learning

Students grouping:

- Students will sit as a class for teacher modeling and direct instruction
- Students will sit in groups to do estimates and measurements

#### How will you assess student learning?

- Whole group and individual student questioning to review terms
- Student observation during independent work
- Students will complete a worksheet, on which they will record their estimations and measurements of objects provided to them
- Students will summarize their learning by writing

#### Materials:

- Book for class read aloud
- Rulers
- Bag of items for students to measure

#### What adjustments to the lesson do you anticipate?

- Adjust as needed to allow students time to make estimates and measurements.
- Address any misconceptions about how to measure using a ruler

Are there any special circumstances of which the observer should be aware? (e.g. new students, special events, special needs)

• Students are both regular and special needs, as are most classes in the school.

#### **Lesson Reflection Form**

#### Teacher Name: A. Rios\_\_\_\_ Date: \_\_November 9, 2010\_\_\_\_

This document is provided to assist teachers in preparing for your post-observation conference. It provides you with an opportunity to document your reflection (Domain 4) and will help to shape your discussion with your administrator. Teachers are strongly encouraged to review the following questions in preparation for the meeting

#### As you reflect on the lesson, were the students cognitively engaged in the work? How do you know?

All students attempted the work and were engaged. Some showed cognitive engagement through discovering ways to estimate. Students explained their thinking to each other in pair / share, and I had one student explain how he measured the string, which was long and difficult to estimate and measure.

# Did the students learn what you expected them to learn? How do you know? If you do not know at this point, when will you know, and what will be evidence of their learning?

I assessed the students' work against the state standards. My assessment showed that 47% of the students were approaching the standard, and that 20% achieved the standard. This was acceptable as a first assessment. I know more will achieve the standard with additional practice and instruction.

## How did the instructional strategies you chose support student learning? How do you know?

I tried to model the strategies that I wanted the students to use. I provided them with materials that were easier to estimate, and some materials, like the string, that were more difficult and required them to think.

#### What have you done to promote a culture for learning in your classroom? I speak with the students about working together and helping each other. I set up tasks where they can work together and learn from each other. I also ask them to share their work by reading aloud so that they can learn from each other.

### Did you alter your lesson plan or adjust your outcomes as you taught the lesson? If so, how, and for what reason?

No, I didn't alter the lesson, however when one student had discovered a successful approach to estimating and measuring the string I did a mini presentation to have him explain his methods to the whole class.

If you had the opportunity to teach this lesson again to the same group of students, what would you do differently? (4a: Reflecting on Teaching)

If teaching this lesson again, I would have students to the estimation first, then give them the measurement tool and have them do measurements after doing the estimates.

### A. Rios: 2<sup>nd</sup> Grade Math Samples of students' work

Estimates help me ...

- no how to measure things
- know if this is correct
- estimates are important and it helps to no if I got it right
- to measure
- helps me by guessing the correct answer

To get an actual measurement I ...

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-measured with a ruler
-used a ruler
-measured it
-use my thumb to measure it
-used my ruler
-put my pencil on my ruler
-measure
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