Trinity Elementary School

Trinity Elementary School is located in Trinity, North Carolina; it is a traditional day school and is a title one school. Traditional school meaning they serve students in kindergarten through fifth grade on a normal ten-month schedule. TES serves a high percentage of poor children; therefore they receive financial assistance from state education agencies to help ensure that all students meet the challenging state standards, classifying TES as a title one school. TES serves 478 students and thirty teachers. The school is not very diverse; 88% of students are white, 6% Hispanic, 5% African American, 2% Asian, and 1% other. The majority of students, 42% are eligible for free lunch and 9% of students are eligible for reduced lunch. The teachers at Trinity Elementary bring a lot of knowledge and enthusiasm to the classroom. Of the thirty classroom teachers, thirty percent of them have advanced degrees and five of them are National Board certified and more than half of the teachers at TES have ten or more years experience in the classroom. The turnover rate at Trinity is higher than the state percentage at thirteen percent.

The following data was collected from the 2013-2014 school year, the school report card that was put out on the DPI website. The achievement scores are based on EOG assessments; in math the school’s score was 53, in math was 55, and in science they received a 72. The school, overall, received an achievement score of 57, which is a C in the school performance grade. The rating system identifies indicators that would help educators, parents and the public understand the status and progress that schools are making toward to prepare all students for college or the career of their choice.
Based on the Professional Learning Committee (PLC) meetings I have sat in, thus far, and what I have heard from the principal and the assistant principal, the greatest weakness at Trinity Elementary is reading and phonics. There are some students in 5th grade that are reading on a second and third grade level. The administration is really beginning to focus on how we can grow over the next few months, especially in reading. Second grade has to grow 29% to meet the goal of 60% of students on proficient. The strengths of Trinity Elementary are math and collaboration. The teachers are Trinity work really well together and they have common goals, closing the achievement gap. The principal has mandated that every other Tuesday of each month, the teachers are required to stay until 4:30, for either school wide planning or professional development meetings. I have seen this give teachers the opportunity to collaborate and use their time wisely. The teachers work hard and are dedicated to their jobs and it is evident through their lesson plans and teaching.
Math Unit 9: Measuring Length and Time
Overview of the Unit

2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

- Students will build upon their knowledge from first grade of measuring with units for the first time. Using both customary (inches and feet) and metric (centimeters and meters) units, Second Graders select an attribute to be measured (e.g., length of classroom), choose an appropriate unit of measurement (e.g., yardstick), and determine the number of units (e.g., yards).
- Students will have the opportunity to use a variety of rulers.
- By the end of Second Grade, students will have also learned specific measurements as it relates to feet, yards and meters:
  - There are 12 inches in a foot.
  - There are 3 feet in a yard.
  - There are 100 centimeters in a meter.

2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

- Students will measure an object using two units of different lengths. This experience helps students realize that the unit used is as important as the attribute being measured. This is a difficult concept for children and will require multiple opportunities to experience predicting, measuring, and discussing outcomes.

2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.

- Students will estimate the lengths of objects using inches, feet, centimeters, and meters prior to measuring. Estimating will help the students’ focus on the object being measured and the measuring process. As students estimate, the student has to consider the size of the unit- helping them to become more familiar with the unit size. Also, estimation creates a problem for the students to solve, instead of a task to be completed. Once a student has made an estimate, the student will then measure the object and can learn from his/her estimation and use that knowledge for the next time they estimate.

2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

- Students will determine the difference in length of two objects using the same tool and unit of measure for both objects. Students will choose an object, determine the tool for which they will measure the two objects, measure them both and determine the difference.
2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

- Students apply the concept of length to solve addition and subtraction word problems with numbers within 100. Students should use the same unit of measurement in these problems. Equations may vary depending on students’ interpretation of the task.
## Calendar for Unit

### March 2015

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<td>Field Trip</td>
<td>MP2, 2.NBT.5, 2.MD.2, Informative Assessment: Thumbs up/down</td>
<td>Substitute in Class, Teacher Planning Day</td>
<td>MP2, 2.NBT.5, 2.MD.2</td>
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### April 2015

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Date: Monday, March 16, 2015  
Unit: Measurement (30-minute lesson)  
Grade Level: 2nd  
Lesson: Introduction/Investigations 9  

<table>
<thead>
<tr>
<th>I can statements…</th>
<th>Standards</th>
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<tbody>
<tr>
<td>I can measure with nonstandard units of measure.</td>
<td>2.MD.1</td>
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<tr>
<td>I can estimate and calculate length using related lengths.</td>
<td>MP.1</td>
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<tr>
<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
<td>2.NBT.5</td>
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</table>

**Opening:** To begin the teacher will begin by introducing the upcoming unit. Together, the students and teacher will brainstorm what they already know about measurement. The teacher will record their thoughts on the Active board. The students will be asked to discuss what tools that they know can be used for measuring. The teacher will also ask the students what are some objects that can be measure and what units we use when measuring. This quick discussion will give the teacher an idea of the students’ current knowledge on the unit. The students will then take a pre-assessment for the unit. The assessment is 5 questions long.

**Activities:**
- Students will compare two lengths by using direct and indirect comparison to identify equal lengths.
- Each table will be given strips A-F, all different lengths. Students will work with partners to find things in the classroom that are about the same length as each strip. The teacher will model one example for the students because they are directed to go out on their own.
- Students will record their answers on Activity Page 1-2.

**Closing:** The teacher will lead a discussion for students about today’s activity. Students will be expected to share findings and their strategies for comparing lengths with the class.
How will the learning be assessed?

Organizer: The students will brainstorm what they already know about measurement at the beginning of the lesson. The teacher will use this information throughout the unit to adjust her teaching.

Pre-Assessment

Information Collected from Informal Assessment: I found that my students didn’t know about units of measure, I know that throughout this unit I need to hit hard on the units of measurement. The students are familiar with some tools for measuring (ruler, measuring cup, and thermometer) they don’t know when to use each tool when measuring certain objects.

Pre-Assessment: The assessment again, proved that students are not familiar with units of measure, 13 of my students couldn’t measure an object using a ruler, and 12 of them couldn’t explain why we use a standard unit of measurement. This assessment helps me plan for the unit, I know I need to hit hard on units of measurement, teach them how to use a ruler and explain to them why we have a standard unit of measurement.

Resources/Materials

Investigations Teacher Guide Unit 9
Investigations Workbook Pages 1-2
Strips labeled A-F (5 sets)
Active Board

Date: Wednesday, March 18, 2015 and Friday, March 20, 2015
Unit: Measurement (30-minute lesson)
Grade Level: 2nd
Lesson: Investigations 9: Scavenger Hunt #2

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<td>I can measure with nonstandard units of measure.</td>
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<td>I can estimate and calculate length using related lengths.</td>
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<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
<td>2.NBT.5</td>
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Opening: The teacher will begin by reviewing what the students did in class on Monday. The teacher will lead a brief discussion about the students’ findings in the scavenger hunt. The teacher will give instructions on how to complete today’s activities.

Activities:
Students will use direct and indirect comparison to identify equal lengths and identify strategies for accurate measurement. Students will conduct another scavenger hunt, but this time students will measure with blue and yellow strips. Ex: They will find things that are a certain number of blue or yellow strips long. The students will work with partners to complete the activity. Once the students have measured an item using the blue strips the students will then estimate how many yellow strips long the object is.

The students will record their information on Activity pages 4-5.

Closing: The teacher will give the students the opportunity to share strategies and any discrepancies the students faced. The teacher will create a chart for students to share their data that they have collected. Which objects are 6 blue strips long, 3 blue strips, 2 blue strips, etc. They will also share the length of objects in yellow strips.

How will the learning be assessed?
The teacher will ask the students how they are feeling about the unit of measurement. The students will be asked to give a thumb up, thumbs in the middle, or thumbs down to express their comfort level of the unit thus far.

**Information Collected from Assessment:** None of my students gave a thumbs up for their comfort level, I expected this because it’s only day two of measurement and we had a field trip in between the two days. However, 16 of my students put their thumbs in the middle and 4 of them gave me thumbs down. To me this shows that the students are getting more familiar with the unit and getting more comfortable. Knowing that it is only day two of instruction, I don’t plan on taking drastic measures just yet. However, during the next activity I will watch and work with the 4 students that gave me thumbs down as we finish the activity on Friday.

**Resources/Materials**

- Investigations Teacher Guide Unit 9
- Investigations Workbook Pages 4-5
- Yellow Strips
- Blue Strips
- Chart Paper

Date: Monday, March 23, 2015
Unit: Measurement (30-minute lesson)
Grade Level: 2nd
Lesson: Investigations 9: King’s Foot

<table>
<thead>
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<th>I can statements…</th>
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<tr>
<td>I can identify the importance of a standard unit of measure.</td>
<td>MP5, 2.NBT.5, 2.MD.1, 2.MD.2, 2.MD.8</td>
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<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
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**Opening:** The teacher will have a discussion with the students about what they were measuring with last week. And the teacher will create a chart with non-standard unit of measure and standard units of measure. The teacher will explain that over the next week or so the students will be adding to the standard unit of measurement column on the chart.

**Activities:**
- The teacher will read aloud the *King’s Foot* story from the investigations book. The story is about a King would wants to have a stable build. He measures using his feet and gives the measurements to the carpenter and she builds the stable. However, the carpenter measured using her foot and so the stable was too small. The teacher will ask the students what the problem is and how it can be solved?
- The second part of the story talks about developing a standard unit of measurement and the carpenter rebuilding the stable to be the right size.
- This will begin the class’ discussion as to why it’s important to have a standard unit of measure. As a class, the teacher will have a few students volunteer. The students will jump and together we will measure the length of their jump using different objects. (Paper clips, pencils, markers, etc.) The teacher will record the data. The students will see that even though the students jumped about the same distance, the measurement was different because of the units of measure.

**Closing:** The students will complete an exit ticket answering the following question: Why is it important to have a standard unit of measurement?

**How will the learning be assessed?**
The students will complete an exit ticket answering the question: Why is it important to
have a standard unit of measurement?

**Information Collected from Assessment:** My students had a hard time putting into words why we have a standard unit of measure. They had the right idea, and I understood what they were trying to say, but it wouldn’t be an acceptable answer on an assessment. I now know I need to discuss this further in the next lesson.

**Resources/Materials**
- Investigations Teacher Guide Unit 9
- Chart Paper
- Exit Ticket

Date: Tuesday, March 24, 2015
Unit: Measurement (30-minute lesson)
Opening: The teacher will review the story that was read yesterday. The students will be asked to identify the problem of the story and how it was solved. The students will talk about the importance of a standard unit of measurement. The teacher will help guide the students in a response since most of them struggled with the exit ticket from the day before.

Activities:
- The teacher will read aloud *Jim in the Beanstalk*. The teacher will talk about the different types of tools used for measuring and what tools to use when measuring certain objects.
- The teacher will then lead a discussion in how the students are going to begin measuring with a ruler. The teacher will show a BrainPop Jr. video on inches and feet and how to measure with a ruler.
- Using Investigations 3.3 the teacher will instruct the students on how to measure with a ruler. The teacher will discuss the important of lining up the ruler at the beginning of the ruler at the edge of the object, marking the end of the ruler with your finger and moving the ruler then moving to the beginning of the ruler tot hat point, not leaving any space between where one ruler ends and another begins. The teacher will demonstrate with objects around the room and have students come up to practice under the document camera.

Closing: The teacher will wrap up the lesson by asking the students to answer two questions verbally:
- What unit of measure are we working with? (Inches)
Why is it important to have a standard unit of measure?

**How will the learning be assessed?**
The teacher will use the students’ answer to the closing questions to help assess the learning from today’s lesson. The students didn’t get hands-on practice with measuring with a ruler, so that won’t be assessed.

**Information Collected from Assessment:** The teacher will know if the students have grasped the idea of the lesson by their answers of the questions. She will not make any instructional changes at this point, as it is still a new concept. (Measuring with a ruler)

**Resources/Materials**

*Jim in the Beanstalk*

Ruler

Classroom objects to measure

Document camera

Date: Wednesday, March 25, 2015
Unit: Measurement (30-minute lesson)
Grade Level: 2nd
Lesson: Investigations 9: Practicing with a ruler

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<td>I can identify the importance of a standard unit of measure.</td>
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<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
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<tr>
<td>I can estimate and calculate length using related lengths.</td>
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<tr>
<td>I can measure using a ruler in inches.</td>
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Opening: The teacher will begin by reviewing what the students talked about yesterday and will review how to use a ruler. The teacher will have one or two students demonstrate measuring an object.

Activities:
- The students will be given the opportunity to measure different objects around the room using their ruler.
- The teacher will explain the proper way to handle a ruler and not playing around with the ruler.
- The students will have a worksheet to fill out as they move around the room. Students should be measuring the length of a pencil, book, glue stick, marker, crayon, and an object of their choice in inches.

Closing: The students will complete a one-problem exit ticket. The students will be asked to measure the object on the exit ticket using inches.

How will the learning be assessed?
The teacher will use the students’ worksheets and the exit ticket they completed in class to adjust her instruction.
**Information Collected from Assessment:** Based on the exit ticket, all but 4 students measured the object properly. Based on the worksheet the students completed, they could all use a little more practice on measuring with a ruler. I have pushed Thursday and most of Friday’s plans into next week to give students additional time with measuring in inches with a ruler. The four students that didn’t complete the exit ticket correctly will meet with the teacher tomorrow at the beginning of the activity to complete a few practice problems with the teacher. At this time, the teacher can see why the students aren’t getting the correct measurements.

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<th>Resources/Materials</th>
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<tbody>
<tr>
<td>Class set of rulers</td>
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<td>Exit Ticket</td>
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<td>Student worksheet</td>
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<td>Classroom objects to measure</td>
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Date: Thursday, March 26, 2015 and Friday, March 27, 2015
Unit: Measurement (30-minute lesson)
Grade Level: 2<sup>nd</sup>
Lesson: Measurement Scavenger Hunt and Metric System Introduction

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<td>I can estimate and calculate length using related lengths.</td>
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<td>I can measure using a ruler in inches.</td>
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**Opening:** The teacher will begin by reviewing what the students talked about yesterday and will review how to use a ruler. The teacher will have one or two students demonstrate measuring an object. The teacher will talk about the importance of having a standard unit of measurement and review the simple conversions the students have been learning about.

**Activities:**
- Over the next two days, students will be completing a measurement scavenger hunt. There will be 15 different task cards posted around the room. Students will have a worksheet to fill in as they move around the scavenger hunt.
- When students arrive at a task card, it will have an object for them to measure in the classroom. The students will need to first estimate the length of the object in inches before they can measure.
- At the beginning of the activity, the teacher will briefly meet with the students that didn’t get the correct measurement on Wednesday’s exit ticket. This activity will take the majority of both math session on Thursday and Friday.
- On Friday, when the students are done, the teacher will discuss the scavenger hunt with the students. The teacher will walk through each task card and measure the object or have a student measure the object to demonstrate for the class.
- If time allows, the teacher will show the BrainPop Jr video on centimeters and meters and begin the discussion about how different countries use the metric system and use different units of measure.

**Closing:** On Thursday the students will answer the following questions on a sticky note and post it on the “What Stuck with you” board.
- How many inches in a foot?
• How many inches in a yard?

**How will the learning be assessed?**
The teacher will use the students’ responses on the What Stuck with you board as an assessment.

**Information Collected from Assessment:** I found that the majority of my students could remember that there are 12 inches in a foot but struggled to remember that there are 36 inches in a yard. Therefore, at the beginning of every math class for the remainder of the unit we had a little chant that we sang about how many inches in a yard, in a foot, and eventually added how many centimeters in a foot and in a meter

**Resources/Materials**
Measurement task cards
Student worksheet
BrainPop Jr video/ computer
Sticky notes

Date: Monday, March 30, 2015
Unit: Measurement (30-minute lesson)
Grade Level: 2nd
Lesson: Moving to Metric

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<td>I can use centimeters and meters to describe length.</td>
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<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
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**Opening:** The teacher will begin by reviewing what the students talked about on Friday. The teacher will ask the students about what units of measure they were working with last week (inches, feet, and yards) and then ask the students if they remember what they will be working with this week. (Centimeters and meters)

**Activities:**
- The students will be moving around the room to find objects that are 1 centimeter long and 1 meter long.
- The teacher will demonstrate what a centimeter is on the ruler and demonstrate how to find if something is a meter long using the measuring tape. 100 centimeters in a meter. The students will record their findings on workbook page 43.
- The teacher will bring the students back together to discuss their findings.
- The teacher will create a chart on the board for students to list their findings. (Objects that are 1 centimeter long and objects that are 1 meter long)

**Closing:** The teacher will wrap up the lesson by discussing what is smaller, an inch or a centimeter. As well as, is it harder to find objects that are a centimeter long or a meter long?

**How will the learning be assessed?**
The teacher will observe the students as they move around the classroom to find objects that are 1 centimeter and 1 meter long.
**Information Collected from Assessment:** I noticed that students didn’t have difficulty measuring with the ruler, but they had a hard time with the measuring tape. They kept forgetting 100 centimeters were in a meter. I will continue with our chant everyday and add that there are 100 centimeters in a meter. This is a new concept, so I don’t plan to make drastic instructional changes yet.

**Resources/Materials**
- Measuring tape
- Rulers
- Workbook page 43
- Chart Paper

Date: Tuesday, March 31, 2015
Unit: Measurement (30-minute lesson)
Grade Level: 2\textsuperscript{nd}
Lesson: Measuring Tools

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<td>I can explain the use of measuring tools.</td>
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<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
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**Opening:** The teacher will start the lesson by once again reviewing the units of measure students have been working with. The students will discuss how many inches are in a foot, in a yard and how many centimeters are in a meter.

**Activities:**
- As a class, the students will talk about which tools to use when using different objects.
- The students know to use inches and centimeters to measure small things and yards, feet or meters for larger objects.
- The students will have white boards with them on the carpet, the teacher will call out an object or show a picture of it on the board and students have to write whether to use a ruler, yardstick, meter stick, or measuring tape to measure the object.
- The students will then complete an interactive notebook that requires students to write different objects to measure with each type of measuring tool they talked about on the carpet.

**Closing:** The teacher will discuss which objects the students came up with on the interactive notebook.

**How will the learning be assessed?**
The teacher will use the student responses on the carpet with the white boards to assess the students learning. She will use this data to see which students were struggling with
identifying which tools to use

**Information Collected from Assessment:** About six students were having a hard time identifying the tools. I then pulled those six students during daily five to work with them. We looked at different objects around the room and looked at the different tools we had and discussed why we would use each type of tool for measuring each particular object.

<table>
<thead>
<tr>
<th>Resources/Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>White boards</td>
</tr>
<tr>
<td>Markers</td>
</tr>
<tr>
<td>Projector</td>
</tr>
<tr>
<td>Computer</td>
</tr>
<tr>
<td>Interactive notebook</td>
</tr>
</tbody>
</table>

**Date:** Wednesday, April 1, 2015  
**Unit:** Measurement (30-minute lesson)
Grade Level: 2\textsuperscript{nd}  
Lesson: Candy Measurement

<table>
<thead>
<tr>
<th>I can statements…</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can identify the importance of a standard unit of measure.</td>
<td>2.MD.2, 2.MD.3, 2.MD.4</td>
</tr>
<tr>
<td>I can compare centimeters and inches.</td>
<td></td>
</tr>
<tr>
<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
<td></td>
</tr>
<tr>
<td>I can estimate and calculate length using related lengths.</td>
<td></td>
</tr>
</tbody>
</table>

**Opening:** The teacher will start the lesson by once again reviewing the units of measure students have been working with. The students will discuss how many inches are in a foot, in a yard and how many centimeters are in a meter.

**Activities:**
- The students will complete the 7-question CFA created by the team for WIN time grouping.
- The students will have 5 different pieces of candy to measure. The students will move around to each table to measure the different pieces of candy.
- The students will first record their estimation for the length of each piece of candy. The teacher will show the students the candy for them to make an accurate estimation.
- The students will move around the room to measure in inches and centimeters. Before they can move to the next table, the students will find the difference in the length in inches and in centimeters. The teacher will do the first one with them, and they will do the rest on their own.
- When they are done measuring, the students will graph their data on a bar graph. The students will choose one unit to represent on the graph. Students should remember a title, labels, and a scale for their graph.

**Closing:** The teacher will have the students that finish early complete a cut and paste activity that have students sort the objects provided into which unit of measure they would use to measure. (Inches, yards, or feet) The teacher will collect both activities.
How will the learning be assessed?
The teacher will use the CFA to assess students learning from the past few weeks and help with a review before the post assessment tomorrow. The worksheets will be collected as well.

Information Collected from Assessment: Using the CFA, Most of my students needed help with the word problem and finding the difference in the measurements. I worked with those students in small groups during the candy measurement activity. Most students did really well on the assessment, besides for the word problem. The students did really well with measuring on the candy activity and the cut and paste activity.

Resources/Materials

- Candy
- Candy Measurement Worksheet
- Rulers
- Cut and Paste activity
- CFA

Date: Thursday, April 2
Unit: Measurement (30-minute lesson)
Grade Level: 2nd
Lesson: End of Unit/ Summative Assessment

<table>
<thead>
<tr>
<th>I can statements…</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can identify the importance of a standard unit of measure.</td>
<td>2.MD.1, 2.MD.2, 2.MD.3, 2.MD.4</td>
</tr>
<tr>
<td>I can identify the length and width of an object using a 12-inch measuring tool.</td>
<td></td>
</tr>
<tr>
<td>I can explain the use of measuring tools.</td>
<td></td>
</tr>
<tr>
<td>I can compare two lengths by using direct and indirect comparison to identify equal lengths.</td>
<td></td>
</tr>
</tbody>
</table>

**Opening:** The teacher will start with a quick review of the unit. The review will be a quick, verbal review.

**Activities:**
- The students will complete the post assessment for the unit.
- In order for students to be considered “mastered” they will score a 4/5 on the assessment.

**How will the learning be assessed?**
The teacher will use the post assessment to assess the students learning.

**Information Collected from Assessment:**

**Resources/Materials**
Post Assessment

Final Reflection
I chose to do a math unit for my electronic evidence because I felt that math was my weakest subject and that collecting data and learning from the data would help me grow and help my students. I chose a unit that I knew my students did not have a lot of knowledge in so that I could, hopefully, see them improve greatly. This was a challenging unit, only because of all the outside events that impacted our lessons. We had a field trip the first week of the unit, and then in that same week my cooperating teacher and I were in a PLC planning day with our team and a substitute was in the classroom. My cooperating teacher and I decided to let the substitute review time and money on that day instead of having her try to teach a new concept to the students. The first week the students had a lot going on and it was hard to get their attention that week. Once we got through that week it seemed to be a little better, but it is still challenging because I only have thirty minute to complete my math lesson.

On the first day of the unit, the students and I brainstormed what they knew about measurement in a web on the active board. My students had little knowledge on units of measure and which tools were used for measuring certain objects. The pre-assessment that I gave to my students on that first day proved the same information I had gathered from that web. I also could see that the majority of my students could not measure with a ruler and could not state why we had a standard unit of measurement. This data was useful to me because I got an idea of what I needed to hit hard on throughout the unit with the entire class. Informal assessments throughout the unit would tell me whom I needed to work with on certain topics throughout the unit. The first week of the unit we only had three instructional days for the students. The students completed two different scavenger hunts over those three days using non-standard unit of measure. Students were
measuring with strips of paper that were different lengths. Students used non-standard units of measure in first grade, so this concept was a review for most students. The students did really well with these activities and seemed to grasp the idea well. Mid-week I did a quick assessment of how the students were feeling with measurement. Sixteen of my students gave me a thumb in the middle telling me they were feeling pretty good with measurement but still needed some practice, and four students gave me a thumb down telling me they needed help and were confused. As I expected, no one gave me a thumb up, with it being the second day of the unit I wasn’t concerned. I did not plan to take drastic action just yet with the students that gave me thumbs down because the unit was so new, however I did take note of those students and worked with them on that Friday as they completed their scavenger hunt. I met with each one of them as they worked to finish up and gave them some guidance on the problem they were working on.

The second week of the unit, we did not have as many distractions as the first week so it seemed to move a little smoother. This week the students were introduced to standard units of measurement. This week students would be working with units of measure. I began with reading a story from the investigations book that the teacher’s can read. It is about a king who wants a stable built and he measures in his feet, but when the carpenter builds it she measures using her feet so the stable is too small. It gives the students an idea of why we have a standard unit of measurement. I showed the students some examples of how we could measure different objects around the room with different units of measure (pencils, paper clips, markers, etc.) and how each measurement would be different. The students completed an exit ticket answering the question “Why do we have standard unit of measure?” The students had a hard time putting it into words,
but accurately explained it the next day in class when we had a discussion about it. I knew the students needed to talk about it more because of their exit tickets. The next day, I read the students *Jim in the Beanstalk* the students, again, get an idea of using a standard unit of measurement. I then showed the students how to measure with a ruler. Before I demonstrated, I showed the students a Brainpop Jr. video on measuring so that students had an introduction to measuring with a ruler. I then demonstrated how to measure using a ruler using different objects around the room. It was not Unit Wednesday of that week that students were given the opportunity to measure with the ruler themselves. The first day students had to measure objects around the room using an inch ruler. The students had a worksheet they had to complete has they moved around the room. At the end of the lesson on Wednesday, I gave the students an exit ticket to complete before we moved into daily five rotations. The exit ticket had one little character on it that the students had to measure in inches. Only four students out of my twenty did not measure correctly. I then took this information and data and pulled those four students on Thursday at the end of the math lesson while the other students were working on an interactive notebook activity independently. I asked the students to show me how they would measure the object on the worksheet I had provided for them. Three of them did not line the ruler up with the end of the object, which was giving them the wrong answer and one student was using the centimeter side of the ruler. The students completed three practice problems with me and by the end they seemed to know what they were doing and corrected their mistakes. I had planned to move onto the metric system for Thursday and Friday but my cooperating teacher and I agreed that it might be better if students got more practice with measuring in inches before moving on. On
Thursday and Friday students completed a measurement scavenger hunt around the room. I post different task cards around the room and students had a worksheet to fill in. They had to first estimate the length of the object on the task card and then they had to measure it. Before students began the scavenger hunt, and throughout the week, I have been talking to the students about simple conversions. How many inches in a foot? How many inches in a yard? On Thursday I had the students answer those questions on a sticky note and post it on the “What Stuck With You” board in the back of our classroom. Each student posted their sticky note on their number block and I was able to see who was grasping the idea throughout the week. I found that the majority of my students could remember that there are 12 inches in a foot but struggled to remember that there are 36 inches in a yard. Therefore, at the beginning of every math class for the remainder of the unit we had a little chant that we sang about how many inches in a yard, in a foot, and eventually added how many centimeters in a foot and in a meter. On Friday, the students finished up the scavenger hunt and we went into the metric system a little bit. I talked to the students about how different countries use the metric system and I showed them the BrainPop Jr. video on centimeters and meters.

The final week of the unit, I really hit hard on the areas that I knew the students had been struggling with during the unit. I had been working with groups during daily five on answering word problems using measurement to meet the standard on 2.MD.5. I had seen that some students were still struggling to know simple conversions. On Monday students worked with measuring in centimeters and meters. They had to go around the room to find things that were a centimeter long and a meter long using the meter strip. I then brought the students back to talk about which was harder to find, an
object that was a meter long or an object that was a centimeter long. The students shared their challenges in finding objects that were a centimeter long because of how small it was. When asked what was smaller, an inch or a centimeter the students would identify that a centimeter was smaller. On Tuesday, as a class, we also discussed what measuring tools we would use to measure different objects. The students had white boards in front of them and I would call out an object and they would write on their boards if they would measure with a ruler, yardstick, meter stick, or measuring tape. I used this data to see which students were struggling with identifying which tools to use. About six students were having a hard time identifying the tools. I then pulled those six students during daily five to work with them. We looked at different object around the room and looked at the different tools we had discussed why we would use each type of tool for measuring each particular object. On Wednesday, the students completed an assessment the team made together to use for our remediation time on Friday’s. The following week’s time would be math and we would use these assessments to place them in different groups based on what they needed help with. I used this assessment to help me with my instruction during that day’s activity, knowing they would be taking their post-assessment the following day. Most of my students needed help with the word problem and finding the difference in the measurements. I worked with those students in small groups during the candy measurement activity on Wednesday. In class, the students moved around the room to measure different types of candies. They had to first estimate the length and then measure in inches and centimeter and find the difference in measurement. On Thursday the students took their post assessment for the unit. We did not have much time afterwards, due to an unplanned fire drill that left us outside for twenty-five minutes.
On the post-assessment, I was sad to see that some students still did not grasp the idea of units of measurement. They could not identify different unit that we use when measuring. However, students did a great job in measuring with inches. On the CFA we gave to students on Wednesday for the grade level team, students were able to identify which tools to use for measuring certain objects, they demonstrated their ability to measure in inches and centimeters and estimate the length of an object. Like I said before, students had a hard time with the word problem and finding the difference in lengths of an object. Moving forward, I think it is important to keep working on the word problems with measurement in the teacher directed part of daily five rotations, at least once a week. I think it is also important to continue to give students the opportunity to measure with the ruler in the hands-on part of daily five rotations. Daily five is great way for students to continue working on previous units while moving onto new units in the whole group lessons. The students seem to have grasped a great understanding in measurement but I think it’s important to continue allowing them to have that practice before the end of the quarter state assessment.