KUTZTOWN UNIVERSITY
ELEMENTARY EDUCATION DEPARTMENT
PROFESSIONAL SEMESTER PROGRAM

Teacher Candidate: Amanda Spaar Date: 2/13

Cooperating Teacher: Brandi Benner Coop. Initials

Group Size: 21 Allotted Time: 50 minutes Grade Level: 2nd

Subject or Topic: Math-Measurement Section

STANDARD: (PA/Common Core):

- CC.2.4.2.A.1: Measure and estimate lengths in standard units using appropriate tools.
- CCSS.MATH.CONTENT.2.MD.A.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, and measuring tapes.

I. Performance Objectives (Learning Outcomes)

- Students will be able to display their knowledge of measuring with centimeters through a game of Baamboozle.
- Students will be able to estimate in centimeters by looking at the objects on the Measure It! paper
- Students will be able to measure in centimeters using a ruler

II. Assessment/Evaluation plan

A. Formative

Assessment: (e.g. product, quick response, interview)	Documentation Tool: (e.g. rating scale, rubric, checklist, anecdotal notes)	Scale: (performance levels)
Observation	Anecdotal notes will be written in my binder for students if I notice a theme of errors between multiple students or an individual student.	No scale will be used unless requested.

B. Summative

- Post Test

III. Instructional Materials (includes amount)

- Powerpoint slides

- iPad (x1 per student)
- Rulers (x1 per pair of students)
- Measure It! paper (x1 per student)
- buzzers (x2 for class)
- Laptop (x1 for teacher)
- Whiteboard marker (x1 per student)
- Whiteboard eraser (x1 per student)

IV. Subject Matter/ Content (prerequisite skills, key vocabulary, new content)

A. Prerequisite Skills

- Students will have already learned how to estimate centimeters using their pinky.
- Students will have already been introduced to the ruler and the inches side.
- Students will know how to play using Baamboozle
- Students will know how to play in a team.
- Students will know how to determine numbers that are greater than and less than another number.

B. Key Vocabulary

- **Estimation**: to make an approximate calculation
- **Centimeters**: a small unit of length - the size of their pinky width
- **Length**: the size of an object or distance from one point to another.
- **Height**: the measurement or size of something up and down
- **Measure**: finding out the length or height of something using a standard unit of measure
- **Ruler**: a tool or device used to measure the length

C. New Content

- Students will learn how to measure objects using the centimeters side of the ruler.
- Students will estimate objects on their Measure It! paper by looking at the objects.

V. Implementation

A. Introduction –

- **Slides 114-119:**
  - I will review with students height and length, our estimated measurements using our hands and arms, and we will discuss which

measurement is least to greatest.

B. Development –

- **Slide 120:**
  - We will talk about where on the ruler we start when going to measure something. I will have students use their whiteboard markers and write whether the first one or the second is right.\
- **Slides 121-123:**
  - We will discuss if an object lands past the halfway mark, we measure up and when an object lands below the halfway point, we measure down.
- **Slides 124-126:**
  - We will practice reading a ruler and students will write the measurement they see on the slide. They will discuss with partners and we will discuss as a group. There will be a black line that shows exactly where the line ends.
- **Slides 127-129:**
  - We will practice reading a ruler and students will write the measurement they see on the slide. They will discuss with partners and we will discuss as a group. This time they will read the ruler without having the line to help them see where it ends.
- **Slides 132-133:**
  - I will introduce the Measure It! paper the students will get. I will complete two rows as an example and put those two rows I complete into the order section of the paper and explain how they would complete the word problem as well as remind them of the greater than and less than signs.
  - Students will first estimate by looking at the objects that are listed on the paper. They will do this for every object. Hen they are finished, they may come up and get it checked and receive a ruler to complete the actual measurements.
  - When students are done the actual measurements, they must show a teacher to approve, and then they will put their ruler back and complete the different sections of their sheet where they subtract the smaller number from the bigger number to get a difference.
  - Students will then order the objects by their length from least to greatest. They will then try the challenge of where they would put the cup in their order of objects. Lastly, students will use their knowledge of the greater and less than signs and determine which objects' lengths are greater than or less than the other objects' lengths.
  - Students will get this paper checked and it will be sent home and put in their folder.
- **Slide 134:**
  - I will display the Baamboozle slide for students to let them know we are about to play. I will divide students into two teams, move desks

around, and put the buzzers on either end of the desks.

C. Closure –

- I will remind students that we learned about estimating and measuring with centimeters.
- I will collect rulers and their Measure It! papers to view if needed, otherwise, they will put them in their folder to keep at home.
- I will have students put all their things away and call them to line get their coats to go outside for recess.

D. Accommodations / Differentiation -

- If we have a significant amount of time left (10-15 minutes or more) students will participate in a centimeter scoot.
- Accommodations and differentiation will be different for each child.
- Students that cannot follow the rules for having a ruler, will lose their ruler and only get to use it when they need to measure.
- The life skills student will have an aid to modify any instruction if needed
- The ELL students will have an aid to modify any instruction if needed
- Differentiated problems for practice in the measurement PowerPoint.
- Students are able to discuss problems that are in the PowerPoints in partners
- There are a range of problems we go through in the PowerPoint I have made so everyone is challenged at one point.

VI. Reflective Response

A. Report of Students' Performance in Terms of States Objectives (Reflection on students performance written after the lesson is taught, includes remediation for students who failed to meet an acceptable level of achievement)

All students did above and beyond during the whole group lesson. When students went off on their own, they did also did well, however, I did notice some students struggling to estimate with centimeters and I feel as though it is because they spent 2-3 days on inches and measuring and estimating with inches that they were still focused on the estimation of inches and not centimeters. I believe if students had another day working on centimeters like they did with inches, I truly believe that they would benefit from a second day of practice. Small groups would also be beneficial with doing a small group and students could participate in a centimeters measurement scoot giving them extra practice.

B. Personal Reflection(Question written before the lesson is taught.)(Reflective answers to questions recorded after the lesson is taught.)

1. **Were students engaged throughout the entire lesson?**

I believe the students were fully engaged through the lesson today. When students were sent out to do the paper on their own, like always, some students didn't work efficiently and weren't able to finish the document while others worked really hard and were on task.

2. **Was my practice of measuring the nearest centimeter beneficial to students?**

I think it was beneficial to a point. Centimeters on a ruler is hard to see to begin with and with it blown up, it was hard for students to see even on my PowerPoint. Brandi mentioned to me I could have the PowerPoint onto SeeSaw so students could have their own personal slides. This would make it easier to view for them.

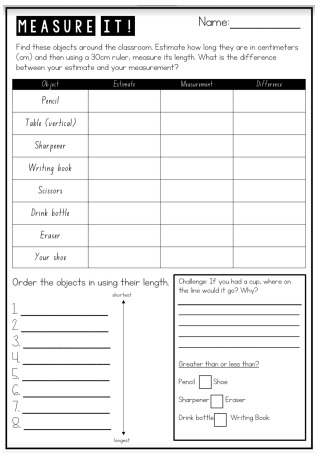
3. **Is there anything I would have changed?**

I think I would have changed a few things. The students were very rowdy and I really struggled with keeping them quiet. We also had the principal, vice principal, superintendent, and another important person come in during this and I wasn't sure what to do and what was appropriate for me to do while they were in there. I feel like I broke down and that's why things got out of hand. I wish I would've changed my management.

VII. Resources (APA Format)

Over 750,000 games made by teachers. Baamboozle. (n.d.). Retrieved February 23, 2022, from https://www.baamboozle.com/games

Spaar, A. (2022). *Measurement Powerpoint*. Google Slides. Retrieved February 23, 2022, from https://docs.google.com/presentation/d/1kLjVrcX_3LZvKU0GWImQPDO2DWolLKb93DmgWFnsx-M/edit?usp=sharing


MEASURE IT! Name:

Find these objects around the classroom. Estimate how long they are in centimeters (cm) and then using a 30cm ruler, measure its length. What is the difference between your estimate and your measurement?

Object	Estimate	Measurement	Difference
Pencil			
Table (vertical)			
Sharpener			
Writing book			
Scissors			
Drink bottle			
Eraser			
Your shoe			

Order the objects in using their length.

shortest

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

longest

Challenge: If you had a cup, where on the line would it go? Why?

Greater than or less than?

Pencil ☐ Shoe

Sharpener ☐ Eraser

Drink bottle ☐ Writing Book