

KUTZTOWN UNIVERSITY
 ELEMENTARY EDUCATION DEPARTMENT
 PROFESSIONAL SEMESTER PROGRAM

Teacher Candidate: <u>Amanda Spaar</u>	Date: <u>2/13</u>
Cooperating Teacher: <u>Brandi Benner</u>	Coop. Initials
Group Size: <u>21</u>	Allotted Time: <u>50 minutes</u>
Grade Level: <u>2nd</u>	
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 measure using inches, centimeters, and yards.
- Students will be able to estimate which unit of measure to use for pictures I put up on the board.
- Students will be able to measure using a ruler and soft tape measure.

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)
Product	Rubric	ME, AE, and BE

NAME Overall: _____	ME Meeting expectations	AE Approaching Expectations	BE Below Expectations
Color	Student used 4 or more different colors to design and decorate their body outline.	Student used 3 different colors to design and decorate their body outline.	Student used 0-2 different colors to design and decorate their body outline.
Creativity	Designs are unique and show originality with lots of detail (Not just a plain t-shirt and pants).	Designs are somewhat unique and show some originality with some detail (Student designs one article of clothing while keeping the rest a plain color).	Designs are not unique and don't show any originality or detail (Student draws a plain t-shirt and pants with no design).
Measurement /Label	Student accurately identifies all four types of measurement units being used to measure their outline and all body parts were accurately measured.	Student accurately identifies three of the four types of measurement units being used to measure their outline and 75% of their body parts were accurately measured.	Student only accurately identifies 0-2 of the four types of measurement units being used to measure their outline and 50% or less of their body parts were accurately measured.
Measurement Unit	Student used good judgement to determine what to measure each part of their body. They applied this with 80% accuracy. Ex. Measure length of a hand with inches and not centimeters.	Student used somewhat good judgement to determine what to measure each part of their body. They applied this with 70-80% accuracy.	Student used good judgement to determine what to measure each part of their body. They applied this with 60% or less accuracy.

B. Summative

- Post test

III. Instructional Materials (includes amount)

- iPad (x1 per student and x1 for teacher)
- Measurement powerpoint
- ruler (x1 per student)
- soft measuring tape (x1 per student)
- pencil box
- pencil (x1 per student)
- body portrait paper

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

A. Prerequisite Skills

- Students will know how to use a ruler
- Students will know how to use a soft measuring tape
- Students will know to measure in inches and centimeters

B. Key Vocabulary

- **Estimation:** to make an approximate calculation
- **Inches:** a small unit of length - the size of their thumb 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 length
- **Centimeters:** a small unit of length - the width of their pinky
- **Yard:** a unit of measure equal to 3 feet

C. New Content

- Students will learn how to measure using a yard

V. Implementation

A. Introduction –

- **Slide 137:** I will play a music video on inches, feet, and yards
- **Poster:** I will discuss the poster I made and the conversions of inches, feet, and yards

B. Development –

- **Slides 138-145:**
 - Students will practice the arm and hand motions for inch, foot, and yard. I will play multiple slides and there will be a measurement unit on it and students need to do the motion for the measurement unit.
- **Slides 146-154:**
 - When I say “inch” students say, “thumb”
 - When I say “foot” students say “12 inches”
 - When I say “yard” students say “3 feet”
- **Slides 155-159:**
 - We will review where to start measuring on a ruler and what happens if an object lands before the halfway mark and after the halfway mark.
- **Slides 160-175:**
 - Students will practice choosing the best tool for measuring objects. I will have put up their fingers to tell me what is the best tool for measure
 - 1: ruler
 - 2: yard stick
 - 3: soft tape measure
- **Slides 176-184:**
 - For these slides students will read aloud the given statement. They will then decide if the object was an inch, a foot, or a yard measure.
 - They will use their Expo marker and erasers and write down which measurement unit the object would be.

- **Slides 185-192:**
 - For these slides students will read aloud the given statement with the blank. They will then decide if the object was an inch, a foot, or a yard measure and read the statement aloud again with the given measurement unit.
 - They will use their Expo marker and erasers and write down which measurement unit the object would be.
- **Slides 193-199:**
 - students will make their best estimate of how long an object is based on what they know. They will get out their Expo markers and erasers and write down the measurement they believe best estimates the object. Students will discuss their choices with their desk partners.
- **Slides 200-201:**
 - I will have two students hand out soft measuring tapes and we will discuss where you start on a soft measuring tape to begin measuring. Students will then practice measuring their desks and their crayon boxes and we would discuss the measurements.
- **Slide 202:**
 - Listed are all the ruler rules that I will be going over with the students before giving them rulers.
- **Slide 203:**
 - This slide is put onto Google Classroom for students to have on their individual iPads to view as a helping aid for their individual work. This will also be displayed on the big screen in the classroom.
- **Slide 204:**
 - This slide is a video from YouTube that has multiple Kidz Bop songs for students to listen to as they do their individual work for their “project”

C. Closure –

- I will remind students that we learned about estimating and measuring with inches, feet, and yards.
- I will collect students measurement papers from the day to check and score with my rubric
- I will have students lay the paper with their outline on the back table.
- 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 an inch 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
- If students are unable to measure their bodies themselves, they will be partners to complete the task. This way they can also help each other in any other regard.
- Differentiated problems for practice in the measurement PowerPoint.
- Students that seem to struggle will be given help from one of the teachers in the room at the time to measure correctly.
- Students will be given a digital version of the measurement layout to take with them on the floor with their iPad to use as a tool.
- Students are able to discuss in partners problems there are in the PowerPoints.

VI. Reflective Response

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

All students did exceptional work for our daily measurement slides and practice. There were many times I had all students involved in providing me answers to my question. The biggest thing I did notice with the students is their comfortability with measuring in centimeters. That is great but it was hard for them to understand when I told them I wanted them measuring in inches, feet, and yards. Students just needed constant reminders.

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

1. Were students engaged throughout the entire lesson?

I believe all students were fully engaged throughout the lesson. I started it out with showing them a music video for measurement as I had all students participating in the PowerPoint slides the entire time. Our final "project/activity" had students measuring and decorating their body drawing. Students had fun socializing with their friends in a relaxed environment while also demonstrating their understanding of measurement.

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

As all students have different lengths of their body parts, so having the practice of measuring the nearest inch was extremely beneficial as not all of their body parts are exactly on a whole number of a ruler. The students knew exactly what to do when it came to measuring and they didn't need much help.

3. Is there anything I would have changed?

I would have split this lesson up into two days. We only have about 50 minutes to teach a math lesson and while that is a lot of time, for measurement it's not with all the things I would like to do with them. I would have liked to do the PowerPoint presentation with the activities one day and then introduce the project at the end of class. The second day we would review what we are doing for the project and students would have all class to do this.

VII. Resources (APA Format)

NUMBEROCK. (2015). *Inches, feet and yards song | Measurement Song - YouTube*. YouTube. Retrieved February 24, 2022, from <https://www.youtube.com/watch?v=P9sYvDCnI0g>

Spaar, A. (2022). *F35v241.zip*. Measurement Poster. Retrieved February 23, 2022, from <https://drive.google.com/file/d/0B1VJtKJlye7FdLZ6X0p2dHFUVGs/edit?usp=sharing>

Spaar, A. (2022). *In. ft. yd. worksheet*. Google Slides. Retrieved February 24, 2022, from <https://docs.google.com/presentation/d/1KcqhaOvYkezsEh4NUfw2O0H4--myd3aeVVsfHFYwWhJQ/edit?usp=sharing>

Spaar, A. (2022). *Measurement Powerpoint*. Google Slides. Retrieved February 23, 2022, from https://docs.google.com/presentation/d/1kLjVrcX_3LZvKU0GWI mQPDO2DWoLLKb93DmgWFnsx-M/edit?usp=sharing