

Lesson Plan

Name: Jeffrey Ignall

School: P.S. 101Q

Grade: 2nd

Unit : Measurement

Topic: Measuring Length in Inches

Teacher materials:

- SMART Board
- White Board/Markers
- 15 Cups of Small Paper Clips
- Pattern Blocks (developing students)
- Measurement Activities and Item Bins (above standard students)

Student materials:

- Pencils
- Cup with 5 Small Paper Clips
- Math Workbook
- Math Journal
- Pattern Blocks (developing students)
- Measurement Activity and Item Bin (above standard students)

Description of physical space (Where are the students? Where is the teacher? What is set up?)

- After taking out their Math Workbooks and Math Journals and establishing good listening positions, students are called up to the front of the room by borough.
- Teacher will use SMART Board and White Board for Modeling and Active Involvement (Together).
- Students return to their desks for Partner Activities.
- Developing students get instruction on pattern blocks.
- Teacher circulates room to answer questions and gauge comprehension.
- Students return to front of the room to share what they wrote in Math Journals.

Teaching Point/Goal: Students will measure length using models that approximate inches.

NYS Standard(s):

- 2.M.1 Use non-standard and standard units to measure both vertical and horizontal lengths.
- 2.M.10 Select and use standard (customary) and non-standard units to estimate measurements.

Performance Indicators:

- Students will be able to identify items that approximate an inch.
- Students will be able to measure the length of items around the classroom in inches.
- Students will be able to identify items that equal a predetermined length in inches.

Connection/Motivation:

- Write Teaching Point on White Board (ask student to read the TP).
- Tell students story of when I was trying to explain the length of my bicycle to a friend so that we could figure out if the bike would fit in his car.
- I told him it was 23 crayons long but he was confused because there are many different types and sizes of crayons.
- Say that he asked me to tell him what the bike length was in inches.
- Have students turn and talk on why they think he asked me what the length was in inches?
- Solicit student responses and explain what a standard unit of measurement is.
- Have students turn and talk to discuss other standard units of measurement that they know.
- Record student answers on the White Board.

Model(I try):

- Explain to students that I didn't have a ruler so I needed to find an item that was about an inch long.
- Show that a small paper clip is about an inch.
- Demonstrate using SMART board how to measure the length of a book using a paper clip.
- Give students rules for measuring: 1) start at the bottom of the item you are measuring; 2) place the end of your measuring object (paper clip) at the edge of your item; 3) use your marker (finger) to mark the end of the measuring object (paper clip); 4) keep your marker down while you pickup your measuring object (paper clip) and place it back down where your marker is -- remember which side of your marker you used to mark the end of the measuring object (paper clip); 5) repeat steps 3 and 4 until you are finished ; and 6) be sure to count out loud the number of times you have used the measuring object (paper clip) - this number will equal the measurement of your item in inches. (THESE INSTRUCTIONS WILL REMAIN ON SMARTBOARD DURING THE PARTNER ACTIVITIES)

Active Involvement (We try):

- Using the rules above, have students help me measure the length of a different book using a paper clip.
- I will ask students to help identify the steps we should be following while we measure.
- Each student volunteer will mark and move the paper clip one time.
- See if there are any questions.

Independent/partner activity /group activity (You try):

- Students will work as partners (pairings will be determined by pretest results).
- Each pairing gets a cup of 5 small paper clips.
- Students return to their desks, pick up their Math Workbooks and Math Journals and stand behind their chairs so they can be rearranged in order to accommodate their pairings.
- Students who are identified for developing differentiated instruction will return to the front of the room for directions on how to use pattern blocks to measure items.
- Partners complete pages 381 and 382 in their Math Workbooks.
- Partners who finish early complete the Measuring Activity.
- With ten minutes remaining in lesson, ask students to stop their work and write the Teaching Point and what they learned in their Math Journals.

Plan for Differentiated Instruction/Activity:

- Developing learners will receive pattern blocks that they can connect together in order to measure items/complete the activities in their Math Workbooks. Pattern blocks will make the measuring process easier for these students and enable them to better internalize the concept of standard measurement using inches.
- Above standard learners will complete a Measurement Activity that will develop estimation skills. The activity will ask students to roll a pair of dice and then find items in a bin that correspond to the number that they roll in inches.

Share/Closure:

- After the students have completed their workbook pages and entries in their Math Journals, bring them back to the front of the room to share what they learned/wrote in their Math Journal entries.

Follow Up/Next Steps:

- For homework, students will be given an activity sheet that will allow them to measure some items at home.
- In a follow up lesson, students will be estimating and measuring length using an inch ruler.

Assessment of Objectives:

- Students will be assessed on their: (1) Math Workbook pages; and (2) entries in their Math Journals.