ST. JOSEPH'S UNIVERSITY
Lesson Plan Format

Name of Student: Eva McCarthy School: Remsenburg Speonk Elementary School

Child Study Course #: CS 424 Date of Lesson: 10/17

Cooperating Teacher: Ms. Christine Simone Grade and/or Age: 2nd Grade

Size of Group: 22

Curriculum Area or Learning Domain: Math
Specific Lesson/Skill Taught: Estimating and Measuring Heights

CONTEXT FOR LEARNING:

This second-grade classroom is an ICT (integrated co-taught) room with 24 students, a special education teacher, and a special/general education teacher. Two students are in a self-contained classroom, and one student pushes in for specials and special events. The other student who is in the self-contained classroom has not yet pushed in for any periods this year. Students are pulled out of class during various periods of the day for speech therapy, occupational therapy, counseling, reading support, math support, and bilingual education. During this lesson, I will utilize ability grouping when constructing my groups for the instructional strategies portion of the lesson. The ability grouping will ensure that diverse student learning needs are met while fostering communication and cooperation between students in different learning groups. If needed, students with IEPs will receive extra assistance, scaffolding, and small-group instruction from the special education teacher. In the past, students have used centimeter cubes or 10cm rulers to measure different objects. During this lesson, students will be able to estimate and measure height using appropriate materials, such as meter sticks, 10cm rulers, and centimeter cubes. In the future, students will be able to represent and solve comparison problems by using measurement contexts.

NEW YORK STATE NEXT GENERATION LEARNING STANDARD:

- NY-2.MD-1: . Measure the length of an object to the nearest whole by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
  Coherence:
- NY-2.MD-2:Measure the length of an object twice, using different "length units" for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- NY-2.MD-3:Estimate lengths using units of inches, feet, centimeters, and meters.

OBJECTIVE:

- Students will be able to estimate and measure height to model metric relationships using appropriate tools on an exit ticket for 3/3 answers marked correctly for 100% accuracy.

MATERIALS:

- SMARTBoard
- Canva presentation: https://www.canva.com/design/DAG07HFUi80/G4EjWUw2gH1JrQjgj4NjAg/view?utm_content=DAG07HFUi80&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=h0cd638803d
- 6 Meter Sticks
- 22 10cm rulers
- Bag of centimeter cubes (minimum 22)
- Whole group measuring activity: https://www.canva.com/design/DAG08LXoJao/L8zWlHUViWbK3iCyLR6ong/view?utm_content=DAG08LXoJao&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=h008416aefe
- Small group measuring activity:
- https://www.canva.com/design/DAG08HI-VPg/5kWF_4QII6fy5N5b9bomzQ/view?utm_content=DAG08HI-VPg&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=h17bfe954d2
- sticky notes
- chart paper/anchor chart paper
- whiteboard markers
- dry-erase boards
- paper towels
- Ruler printout: https://docs.google.com/document/d/1hyFt2e9XoeLz0lP4wkmYPMFJybsGkYSALbrPVLF3zSI/edit?usp=sharing
- re-engagement activity: https://www.canva.com/design/DAG1JTD57zI/w2nf7e38EvhMstm0BUMtqw/view?utm_content=DAG1JTD57zI&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=h2064f4a222
- Bonus/Extra Activity: https://www.canva.com/design/DAG1JreBhIY/qn87FztoVLkPYJL0wbIrKQ/view?utm_content=DAG1JreBhIY&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=h0704fb7dbb
- Differentiation ELL cards: https://www.canva.com/design/DAG1J8qo3h4/Flfqnc_BwCearykys3dkJg/view?utm_content=DAG1J8qo3h4&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=h8e90ae1ece

INTRODUCTION/MOTIVATION:

- To introduce this lesson, I will first display a presentation on the SMARTBoard. For this portion of the lesson, students will be seated at their desks.
- First, I will outline the lesson's objective. I will ask one student to read the objective aloud from the board to the class.
- After a student reads the objective, I will ask students, “What does it mean to estimate?”
- Next, I will introduce the fluency portion of the lesson. For our fluency portion, we will be reviewing the commutative property of addition. First, I will give directions for this

portion. “Now we are going to start with our fluency. You will be working in groups with your tables to answer these questions. One person will be the recorder, and then you will switch to the right each time. Everyone at your table might not get a turn, and that is okay. Since this is part of our math fluency practice, which we do every day, you will need to answer the questions quickly. Does anybody have any questions about the fluency?”

- Next, I will pass out the materials for the fluency: one dry-erase board, one dry-erase marker, and one paper towel to each table (4 total tables). While handing out materials, I will select one person from each table to serve as the recorder, and as I make this selection, I will remind them of their responsibilities.
- Once everyone has the materials, I will begin the fluency. I will display the equation “13+1=” on the board and then count to five for students to finish writing their answers and display them on their boards. After we discuss the correct answer, I will then ask students which numbers are addends and the total. We will repeat this routine for the following three examples/slides.
- After completing the fluency with the commutative property of addition, I will proceed to the fluency portion involving adding with a ruler. To do this, I will present the first slide with the 10cm ruler on it and instruct students to flip their dry-erase boards over to the slide with the 10cm ruler on it. Next, I will ask students to put their finger on 2cm. Then, I will ask them some adding questions. “If we start with our finger on 2cm, if we add 5 more cm, how many cm would we have now?” I will repeat these questions based on the printed rulers in the back of their dry-erase boards for two more examples before transitioning to the body of the lesson.

INSTRUCTIONAL STRATEGIES:

- Next, I will review the values of various measuring materials, such as meter sticks, rulers, and centimeter cubes. When I present the slide with the meter stick on it, I would ask students, “What is this a picture of? Where have you seen this before? What could this be used to measure? How many centimeters are in this tool of measurement?” Once students have answered all of these questions, I will click the next slide, which will present the questions on the board.
- I will repeat these questions for the pictures of the 10cm rulers and centimeter cubes as well.
- Next, I will ask students questions about estimating heights. To do so, I will click on the slide of the presentation with a giraffe and a meter stick. I will then ask the students: “If this one meter stick goes up to about here on the giraffe, about how many meter sticks do you think we would need to tell the giraffe's height? Turn and Talk to the person next to you about how many you would need.” After students turn and talk, I will select some volunteers to share their answers before switching to the next slide to review the responses.
- After reviewing the giraffe, I will click to the next slide where the classwork worksheet is displayed, and then I will hand out the worksheet to students at their desks. Once every student has a worksheet, I will tell them to put their name on it and await further instructions.
- Next, I will inform the students that I will randomly select one student to measure for our activity. Upon picking a student, I will call them up to the front of the room to measure their height.

- First, I will stand the student in front of the whiteboard and draw a line at the top of their head on the board to represent their height.
- Next, I will ask students about appropriate measurement materials for this specific situation. “If we were measuring Johnny’s height, realistically, would we sit here with centimeter cubes and line them all up and count them until we got our answer? No! Would we sit here and use a bunch of 10cm rulers to measure his height? We could, but is that the best option? No! Could we use a meter stick first, then use smaller units of measurement after? Yes!”
- Then, I will ask students to make a prediction of how many centimeters they believe their friend’s height is. I will remind students that a meter stick is 100cm, the small clear rulers are 10cm, and their cubes are 1cm. I will ask students to make their predictions and write them down on their paper. After giving them some time to do so, I will ask a few students to share their predictions and explain how they arrived at their answer.
- Next, I will measure the student at the front of the classroom using meter sticks, 10cm rulers, and centimeter cubes if necessary. Once we obtain the students' heights in centimeters, I will write them on the board and instruct students to copy the same information onto their worksheets.
- Once we finish finding and recording the actual height, I will ask students questions about how I measured them. “How many meter sticks did I use when I measured Tommy? What about how many small rulers, or centimeter cubes?” Once the students answer the questions, I will record the answers on the SMARTBoard and instruct students to do the same.
- After we finish the worksheet, I will ask students to keep it on their desks for reference while we move on to the next activity. At this point, I will ask students to help me distribute the following worksheet, which they will work on in groups.
- Before I ask the students to work in groups, I will work through the first problem on the worksheet with them as a whole group, so they can gain a better understanding and have an example.
- First, I will ask students how many centimeters are in a meter stick. Then, since there are 100cm in a meter stick, I will ask students, if they are using only 1 meter stick to measure, how many centimeters tall are they? Next, I will repeat the same instruction/questioning for both the 10 cm rulers and centimeter cubes used to describe the height of a character/figure.
- After completing the first question together as a whole class, I will ask the students if they have any questions before we break into groups.
- After answering any questions, I will list the names of students in each group and write them on the whiteboard for a visual representation. Once I have read off all the names and written them down, I will ask students to go to the designated areas of their groups.
- During this time, there will be three groups: one student working with me, one group working with the special education teacher, and one independent group. During this time, the second special education teacher will be circulating the room, monitoring student progress.
- In their groups, the students will be tasked with completing the worksheet together. I will use the visual timer in the room to display a 15-minute timer for the group work. Additionally, if a group finishes their work early, they will complete a cut-and-paste

activity at their desks about appropriate measurement until the timer goes off or the rest of the groups finish.

INCORPORATING TECHNOLOGY:

- During this lesson, I will use various forms of technology. For instance, a computer was used to make the Canva presentation and all worksheets/activities for this lesson. A SMARTBoard was used to display the presentation and worksheets for this lesson.

DIFFERENTIATION:

- **For students with ADHD/ADD,** if they become too distracted or overstimulated during the assignment, they will have the opportunity to take a brain break and return to their seat. Additionally, they can utilize differentiated seating with different pads and bolsters while sitting on the carpet or at their seats.
- **For students with speech and language impairments,** they will have their own manipulatives to use during this lesson. They will be provided with visual prompts and examples. In the small group, the teacher will read and check for understanding when reviewing the instructions, and students will have the opportunity to sit close to the teacher.
- **For English Language Learners**, cards will be provided defining each unit of measurement in both languages, along with pictures of each measurement that can be used as a tool during both whole-group and small-group instruction.

ACADEMIC LANGUAGE:

Language Function:

- **Estimate:** Students will use estimation to predict the height of certain objects or people before using measuring materials
- **Measure:** Students will use measurement through the use of meter sticks, 10cm rulers, and centimeter cubes to find the height of different objects or people

Academic Vocabulary:

- **Domain Specific:** Identify, measure, estimate, centimeter, meter stick, centimeter cube
- **General Vocabulary:** How many, height

Syntax:

- Students will utilize syntax through answering and constructing questions within their tables, through discussion, and in their groups when completing their assignments

Discourse:

- Students will engage in discourse through conversations with their tablemates when asked to turn and talk about topics throughout the lesson
- Students will engage in discourse when broken into groups to discuss the heights of different objects and people

CLOSURE:

- Once each group has finished, I will redirect the attention to the front of the room. I will explain to the students that we will be completing an exit ticket at the end of the lesson. On the board, I will post a question regarding the height of the special education teacher in centimeters. I will pass out Post-it notes at this time, and ask students to write their

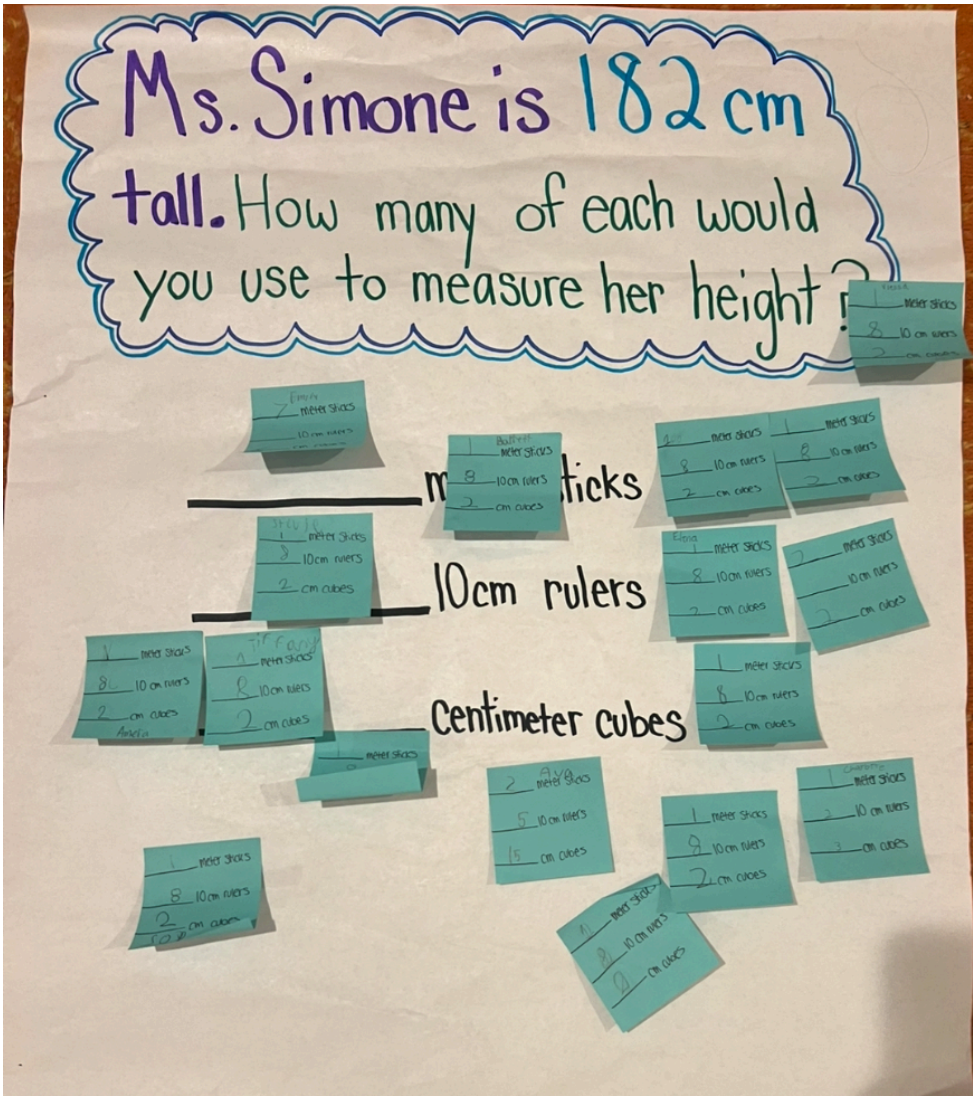
answers and name. When they are finished, post them on an anchor chart at the front. I will keep these post-its as my assessment of learning during the lesson and to identify which students require reengagement.

EVALUATION/ASSESSMENT:

- **Informal Assessment:** For the informal assessment during this lesson, I will utilize observation through students' conversations during the turn-and-talk portion, when asking for participation in whole-group activities, and when students work together in their groups. During the closure portion of the lesson, I will also use informal assessment to observe students as they complete their sticky notes.
- **Formal Assessment:** For the formal assessment during this lesson, I will use the exit ticket to assess students' level of comprehension. Completing an exit ticket that is aligned with the standards will help me understand how well the students have responded to my teaching during the lesson. Additionally, the students will be asked to complete the exit ticket without any help from peers or teachers so that the assessment results will be accurate. I will use the exit ticket to determine if students met the learning objective, and if they did not, students will engage in the re-engagement portion of the lesson.

RE-ENGAGEMENT:

- For students who did not meet the learning objective, I will pull students later on in the day or the next day to review the material. To do so, I will complete the re-engagement activity. First, I will review the values of different measurement tools, such as meter sticks, cm cubes, and 10cm rulers. After reviewing this together in our small group, I will review the re-engagement activity with students. I will read the directions and explain each question before asking the students to complete the assessment on their own. After they finish the activity, I will save these papers to assess if the students have made progress or if they need additional support.



Exit Ticket Anchor Chart: For their exit ticket, students used pre-organized sticky notes to paste their answers on an anchor chart displaying the question for their formal assessment.