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| **PLANNING** |
| **Standards**  | 2.MDA.3 Estimate and measure length/distance in customary units (i.e., inch, foot, yard) and metric units (i.e., centimeter, meter).  |
| **Objective/****Learning Outcome**  | After direct instruction and guided practice, students will be able to estimate and measure length/distance in customary and metric units by completing a station rotation worksheet with 80% accuracy. |
| **EEDA** | **Career:** construction worker, contractor, architect, seamstress, athletes**Real World Application:** Students will use customary and metric units of measurement daily often without realizing it. For example, a student who is playing football would need to know how many yards are needed to complete a pass. |
| **Sequencing/ Long Range Planning**  | The lesson created should correlate with the scope chart set forth by the school and district. This lesson is aligned with the South Carolina state standards in measurement and data analysis as it applies to second grade. Students must learn how to estimate and measure length/distance by using customary and metric units. |
| **Grouping**  | Initially, the students will be taught as a group through direct instruction and guided practice. Eventually, they will progress to various “stations” set up around the room and playground area to complete their independent practice. |
| **Materials**  | * Rulers (in., cm)
* Yard stick
* Meter stick
* Smartboard
* Visual presenter
* Pencils
* Clipboards
* Various objects to measure
* Assessment sheet
* Chart paper
* Pre-made measurement anchor chart
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| **Collaboration**  | Collaboration may occur during common planning with other second grade teachers. Ideas shared can be combined to create a more affective lesson. |
| **Assessment**  |

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| Pre | To pre-assess, the following questions will be asked:1. What d you know about measurement?
2. What is length? Distance?
3. Name some units you are familiar with that are used to measure length/distance.

\*Responses will be recorded on chart paper and displayed. |
| Post  | For the post-assessment, the students will complete a “station rotation” worksheet that requires them to measure various objects with specified measurement tools and/or discover objects that would be measured using a unit through estimation. |

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| **INSTRUCTION** |
| **Instructional Planning**  | **Introduction:** To introduce the lesson, the lesson objective and accompanying state standard will be communicated. Pre-assessment will also take place during this time (see pre-assessment section). An emphasis on careers that may use this skill should also be communicated and discussed.**Procedures**:1. The lesson will begin by stating the lesson objective and standard (written in a place that is visible to the students).
2. Pre-assessment questions will be asked to determine prior knowledge of the objective with the teacher writing student responses on an anchor chart.
3. Students should remain in their groupings for the direct instruction and guided practice of the lesson.
4. Classroom expectations will be reviewed to maintain the students’ focus and attention.
5. A pre-made anchor chart (teacher created) will be displayed that introduces the customary and metric units to be studied.
6. The terms **l**ength (**l**ong)/distance and estimation will be reviewed again to ensure the students are aware that the units being studied measure how far or how long.
7. The measurement tools (ruler, yardstick, etc.) will serve as visuals as the teacher introduces the units of measurement and models the correct way to measure using the tools (place on visual presenter).
8. The teacher will then provide example problems or scenarios to help guide the students through the process of determining the most appropriate unit of measurement to use for estimation and actual measuring.
9. The lesson objective and standard will be reviewed once again.
10. The directions for the “station rotation” will be communicated before the students begin their independent practice of the skill to clarify any words/directions they are unsure about.

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| **Assessment Data**  |

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| Student | Assessment Grade | Met Objective |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |
| 11 |  |  |
| 12 |  |  |
| 13 |  |  |
| 14 |  |  |
| 15 |  |  |
| 16 |  |  |
| 17 |  |  |
|  |  |  |

Students who met objective:Students who did not meet objective:Girls who met objective:Boys who met objective: |

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| **ENVIRONMENT**  |
| **Expectations**  | Ideally, classroom expectations should be posted in an area of the classroom where they are visible to all students. Refer to the expectations as needed to ensure that students stay focused and on task. From time to time, expectations may need to be reviewed several times during a lesson. |
| **Managing Student Behavior**  | If disruptions occur, several techniques may be used. Examples: pause/wait, proximity, reinforcing appropriate behavior |
| **Environment**  | Depending on the lesson, expectations for the classroom environment will fluctuate. For this lesson, a more structured approach will be used during direct instruction while the station rotation portion will allow for more independence due to the movement involved and the change of the environment (outside).  |

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| **PROFESSIONALISM AND REFLECTION** |
| It is vital to reflect upon a lesson once it has been taught. Document the positives and negatives you noted. Review the assessment data to determine what areas had the highest areas of achievement and which areas need to be revisited. Mini lessons are useful to help with those areas that need improvement. |

**Anchor Chart Idea**

**Measuring Length/Distance**

**Customary** **Metric**

Inch (in.) centimeter (cm)

Foot (ft.) meter (m)

Yard (yd.)

**Ideas to help the students remember these units of measurement.**

Little **Izzy Inch** is small. She can be used to measure a peanut or a paperclip.

**Frank the foot** is about the size of a sheet of notebook paper.

**Yolanda the yard** is used to measure longer lengths or distances such as the length of a football field.

**Cute Cindy centimeter** is like her cousin Izzy Inch, so you will use her to measure shorter lengths/distances.

**Masculine Meter** is related to Yolanda Yard so longer lengths/distances will best be measured with him.

**Rotation Station worksheet idea**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions:** Answer the following questions as you rotate through stations 1-5. You will see the numbers in front of each station.

**(Inside Stations)**

**Station 1**: Estimate how long you think the feather is.

\_\_\_\_\_\_\_ in \_\_\_\_\_\_\_ cm

Use the rulers provided to get an exact measurement.

\_\_\_\_\_ in \_\_\_\_\_ cm

**Station 2:** Find two objects in the classroom that you think are about 3 cm in length.

Object 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Object 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Measure the objects using the provided ruler. Were you correct?

Object 1? Yes No

Object 2? Yes No

**Station 3:** Create a measurement question for the next person that visits this station. Write your question on the provided paper.

**(Outside stations)**

**Station 4:** 5 yards have been measured on the playground and shown with the orange cones. Place one foot in front of the other to determine how many of your feet it will take to travel the length that is marked.

\_\_\_\_\_\_\_\_\_ “feet”

**Station 5:** Find three objects on the playground that are about a meter long. Use the meter stick provided.

Object 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Object 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Object 3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_