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| **Standards-Based Lesson Template** | | | |
| **Teacher**: | | | **Date**: 10/5/2018 |
| **Grade Level**: 3 | | **Class Name**: | |
| **Subject**: Mathematics | | **Duration**: 35 minutes | |
| **Lesson Title**: Measurement of Lengths, Heights and Distances. | | | |
| **Standards Addressed** | 1. Estimate and measure lengths, heights and distances using the metre, or the centimetre as the unit of measure (**MT.3.M.LM.1**) 2. Explain why there is a need for a smaller unit of measure – the centimetre (**MT.3.M.LM.2**) | | |
| **Learning Outcomes** | After engaging in the activities of this lesson, students should be able to:   1. Identify lengths, heights and distances that are approximately one metre. 2. Estimate the lengths of objects and distances in the classroom using the metre and the centimetre 3. Measure the lengths and heights of objects and distances in the classroom using the metre and centimetre. 4. Explain why there is a smaller unit of measure-the centimetre | | |
| **Previous knowledge** | Students should already:   * Be able to estimate and measure lengths, heights and distances using non-standard units. * Estimate, measure and compare lengths, heights and distances to the nearest metre. | | |
| **Materials/ Resources** | Metre rule, metre strips, 12 inch rulers, familiar and unfamiliar objects that are about one centimetre long. objects in the classroom, worksheet, | | |
| **Content** | The basic unit for measuring lengths, heights and distances is the Metre (m). The metre is divided into smaller units, for example – Centimetres. The Centimetre (cm) is used to measure lengths, heights, and distances that are less than a metre or between metres. | | |
| **Starter** | The teacher will demonstrate a clapping pattern and have students imitate the pattern. The teacher informs and place students in groups in preparation for the lesson. | | |
| **Introduction** | The teacher will place a strip of paper on the chalkboard (about 40 centimetres). Students will be asked to say how long they think is the strip of paper. Students should recognize that they cannot tell exactly the length of the paper. Teacher will tell the students that in today’s lesson they will be measuring lengths, heights and distances. | | |
| **learning Activities** | Teacher declares to students that the Metre is the basic unit used for measuring length, height and distances (give examples). The word metre and the abbreviation (m) is placed on the chalkboard.   * The teacher places a metre rule or metre strip in each group for students to observe its length. Students will write the name of two objects in the classroom that are about one metre. Each group will communicate their answers. Correct responses will be written on the chalkboard. * Students will be asked to first estimate (guess) how many metres is the length of the classroom, then use the metre rule or strip to measure the length to the nearest metre. Discuss group’s answers. * Discuss how to measure the strip of paper on the board (used in the introduction). Teacher declares that there is a smaller unit of measure – the centimetre. Students examine the centimetres on the metre rule. Students are asked to place the top of their little finger between a centimetre and state how many centimetres are on the metre rule (to understand the size of a centimetre). * Teacher places a 12” ruler in each group. Students identify the centimetres (0 to 30 cm). Each group is given a new pencil and students will first estimate the length in centimetres then measure using the 12” ruler (to the nearest cm). Groups will select to estimate and measure either a length or height of an object or the distance between two objects. Answers will be recorded on chalkboard and discussed the question: why there is a smaller unit of measure? | | |
| Assessment Activity | Students will complete a worksheet with the names of objects to estimate and use the measuring tools to measure the following attributes.  Example:  Length   * Chalkboard * Math text book   Height   * Chalk box * A student   Distance   * Two points on the desk | | |
| Closure | Teacher will ask individual students to share what they have learnt in the lesson. The responses will be used for a summary of the lesson content. | | |