*****GCU College of Education***

**LESSON PLAN TEMPLATE**

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| **Teacher Candidate:****Grade Level:****Date:****Unit/Subject:****Instructional Plan Title** | MathMeasurement and Data |
| **I. Planning** |
| **Lesson summary and focus**: | *Manipulate a variety of measures to other measurement units in a specified system.**Understand concepts of measurement.**Learn about various graphical representations.* |
| **Classroom and student factors**: | Will engage in the use of Augmentative and alternative communications in the benefit of the group who have speech problems or challenges. |
| **National / State Learning Standards:** | [CCSS.MATH.CONTENT.5.MD.B.2](http://www.corestandards.org/Math/Content/5/MD/B/2/)Display a dataset ofmeasurements usingplots and graphs. |
| **Specific learning target(s) / objectives:**The students should apply the knowledge on fractions and measures to the real-life objects by the end of the lesson. They should be able to get the same answer when manipulating in fraction forms or decimal forms. | **Teaching notes:**The possible challenges include the getting of recurring decimals or obtaining large decimal numbers for the fractions. The students may not be aware of the scale of conversion. The teacher solves the recurring decimal issue, and the writes the scale of conversion at top right corner of the board. |
| **Agenda:***Opening Activities**Ask how many cm make 1m and 1 km**Compute* *11×3)×(7-2)**Learning and teaching activities**Convert 2km into meters**Convert 20 cm into m**What is the sum of 4 and 8 divided by 3**Closure activities**A class of 10 students has 6 boys and 7 girls. If boys have 9 books and the girls have 8 books. How many books are in the class?* | **Formative assessment:***The measurement of the assessment will be through the questions whereby the students should show the procedure of obtaining the answers.* |
| **Academic Language:** | ***Key vocabulary:*** The vocabularies used in this topic are such as spheres, volumes, cylinder, cuboids cubes and transition words. | ***Function:*** *The language is to show how the progress of the manipulations takes place especially through the use of the transition words which describe the process as it happened.* | ***Form:*** *The depth of understanding will be demonstrated through the consequential use of the vocabularies and transition words in context. The transition words will be the connection in between vocabularies.* |
| **Instructional Materials, Equipment and Technology:** | *Markers**Pens* *Black Papers**Erase board**Eraser**Ruler*  |
| **Grouping:** | *The students are in the group of three as selected. They include Arturo, Diana and Brandie.* |

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| **II. Instruction** |
| **A. Opening** |
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| **Prior knowledge connection:** | *This lesson connects to fraction and decimal points as studied because in the measurements there are decimals used which are converted to fractions for manipulations* |
| **Anticipatory set:** | The measurement techniques are used in the survey and construction while the interpretation of data is used in the statistical field for dataanalysis and reporting. |
| **B. Learning and Teaching Activities (Teaching and Guided Practice):** |
| **I Do** | **Students Do** | **Differentiation** |
| *Your “I Do*1. *In the introduction to the topics, the students are reminded of the prior knowledge in multiplication.*

*What is the answer to 12.456×7.564*1. *As the lesson proceeds, the teacher introduces the topic and takes the students to the basic about measurements and conversion of units*

*Express the following in Meters**2.45km**22896 cm**4325325 mm*1. *The teacher teaches the basics as regards the graphicalrepresentations*

*The teacher shows the students on the basic plotting of (3/4,5/6)**If the volume of water in a can is 60 liters. How many bottles of 5 mls will it fill?* | *Your “Students Do”* 1. *The students work out the vales of some multiplications*

*Example What is 8.36×4.365*1. *The students in small groupsdiscuss the conversion of units*

*Convert the following into liters**252658ml**1.2564 kl**56471cl*1. *The students work on the worded problems.*

*A group of 11 students sold 4 dozens of pens to the strangers. What fraction of pens did each student sell?**Let the students locate the points on an x-y axis such as (21/2, 32/5)* | The students who are outstanding are the ones that note the implication of a dozen in contextThey are also able to convert the values successfullyThe students are also able to interpret wordy questions |

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| **III. ASSESSMENT** |
| **Summative Assessment:** | *The masterly of the content learnt by the students will be through the use of a test that all should complete.**The length of a ruler is 7 ½ cm, and the length of a pen is 3 7/8 cm. What is the difference between the length of a ruler and the of a pencil?* | **Differentiation:***The students who are academically challenged will have a list of instructions pinned at the front of their desks. They will also have the Augmentative and Alternative Communication devices to aid in the conveyance of information.* |
| **Closure:** | *At the closure of the session, the students will be asked tomeasure the lengths of their desks answering in fraction form and then subtract the length of their text books* |
| **Homework:** | *The area of the base of a cylinder is 34.67 cm2. The height of the cylinder is 5.02cm. What is the volume of the cylinder? This assignment is skill-practice based and enhances the measurement and the interpretation of information.* |