**DAILY LESSON LOG OF M10SP-IVd-e-1 (Week Four-Day Two)**

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| **School** | | **Grade Level** | Grade 10 |
| **Teacher** | | **Learning Area** | Mathematics |
| **Teaching Date and Time** | | **Quarter** | Fourth |

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| **I. OBJECTIVES** | *Objectives must be met over the week and connected to the curriculum standards. To meet the objectives, necessary procedures must be followed and if needed, additional lessons, exercises and remedial activities may be done for developing content knowledge and competencies. These are assessed using Formative Assessment Strategies. Valuing objectives support the learning of content and competencies and enable children to find significance and joy in learning the lessons. Weekly objectives shall be derived from the curriculum guides.* |
| **A. Content Standards** | The learner demonstrates understanding of key concepts of measures of position. |
| **B. Performance Standards** | The learner is able to investigate thoroughly the mathematical relationship in various situations, formulate real life problems involving measures of position and solve them using a variety of strategies. |
| **C. Learning Competencies/ Objectives** | Learning Competencies: Solves problems involving measures of position.<br>**(M10SP-IVd-e-1)**<br>Learning Objectives:<br>1. Determine the values to be used in solving percentiles for grouped data;<br>2. Solve the percentile of the scores; and<br>3. Show appreciation in solving percentiles. |
| **II. CONTENT** | Measures of Position(Percentiles) |
| **III. LEARNING RESOURCES** | teacher's guide, learner's module, k-12 Phoenix |
| **A. References** | |
| **1. Teacher's Guide pages** | Pages 346 |
| **2. Learner's Materials pages** | Pages 395 |
| **3. Textbook pages** | |
| **4. Additional Materials from Learning Resource (LR) portal** | |
| **B. Other Learning Resources** | |

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<tr><td>IV. PROCEDURES</td><td>These steps should be done across the week. Spread out the activities appropriately so that pupils/students will learn well. Always be guided by demonstration of learning by the pupils/ students which you can infer from formative assessment activities. Sustain learning systematically by providing pupils/students with multiple ways to learn new things, practice the learning, question their learning processes, and draw conclusions about what they learned in relation to their life experiences and previous knowledge. Indicate the time allotment for each step.</td></tr>
<tr><td>A. Review previous lesson or presenting the new lesson</td><td>The teacher asks the students “ What are the terms needed in solving measures of position for grouped data?<br>Possible responses:<br>Lower boundary, total frequency, cumulative frequency before the percentile class, frequency of the class and interval</td></tr>
<tr><td>B. Establishing a purpose for the lesson</td><td>The teacher lets the students realize that knowing the terms of the formula in solving percentiles are important skills needed to understand the concepts of percentile problems.</td></tr>
<tr><td>C. Presenting examples/ instances of the new lesson</td><td>The teacher lets the students, in group of 3 do the Activity.<br><table><tr><th>Number of employees</th><th>Number of Companies</th></tr><tr><td>41-45</td><td>11</td></tr><tr><td>36-40</td><td>6</td></tr><tr><td>31-35</td><td>9</td></tr><tr><td>26-30</td><td>7</td></tr><tr><td>21-25</td><td>8</td></tr><tr><td>16-20</td><td>4</td></tr></table>The following is a distribution for the number of employees in 45 companies belonging to a certain industry. Calculate the 85 percentile and $40^{th}$ percentile of the number of employees given the number of companies.<br><br>Answer Key:<br>$P_{85} = 42.43$<br>$P_{40} = 29.79$</td></tr>
<tr><td>D. Discussing new concepts and practicing new skills #1</td><td>The teacher discusses with the students the process of arriving at the answer of the activity. Furthermore, he/she asks the students the mathematical skills or principles that they used to solve problems on percentiles for grouped data. He/She tells them that in solving percentiles for grouped data, you need the percentile class to determine the values of the terms in the formula.</td></tr>
<tr><td>E. Discussing new concepts and practicing new skills #2</td><td>The teacher tells the class: “We can also find the percentile of the scores.”<br>The teacher discusses another problem to the class and let them understand the solution.</td></tr>
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| | **Solved Examples**<br><br>**Question 1:** The scores for student are 40, 45, 49, 53, 61, 65, 71, 79, 85, 91. What is the percentile for score 71?<br>**Solution:**<br><br>No. of. scores below 71 = 6<br>Total no. of. scores = 10<br>The formula for percentile is given as,<br><br>Percentile = $\frac{No.\ of\ values\ below\ x}{Total\ no.\ of\ values} \times 100$<br><br>Percentile of 71<br><br>= $\frac{6}{10} \times 100$<br><br>= $0.6 \times 100$<br><br>= 60<br><br>Note: Teacher-student interaction |
| **F. Developing mastery (leads to formative assessment 3)** | Working in pairs, the teacher lets the student to solve the percentile of the scores.<br>1. The following are the scores of the students 5,7,12,14,15,22,25,30,36,42,53,65. What is the percentile for score 22? 53?<br><br>Answer Key:<br>1. Percentile of 22 is 42<br>2. Percentile of 53 is 83 |
| **G. Finding practical applications of concepts and skills in daily living** | |
| **H. Making generalizations and abstractions about the lesson** | The teacher summarizes the mathematical skills or principles used to solve problems on percentiles through questions like:<br>1. What did you do to arrive your answer?<br>2. What is the formula in finding the percentile of the scores?<br><br>Answer Key:<br>1. Use the formula<br>2. Percentile = $\frac{The\ number\ of\ values\ before\ x}{Total\ number\ of\ values}$ x 100 |
| **I. Evaluating Learning** | The teacher lets the students answer individually the formative assessment.<br>Given the 50 multiple- choice items in their final test in Mathematics, the scores of 30 students are the following:<br>23,38,28,46,22,20,18,34,36,35,45,48,16,22,27,25,29,31,30,25,44,21,18,43,21,26,37, 29,13,37<br>What is the percentile for score 26?<br><br>Answer Key:<br>Percentile of 26 is 40. |

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| **J. Additional activities or remediation** | |
| **V. REMARKS** | |
| **VI. REFLECTION** | *Reflect on your teaching and assess yourself as a teacher. Think about your students' progress. What works? What else needs to be done to help the pupils/students learn? Identify what help your instructional supervisors can provide for you so when you meet them, you can ask them relevant questions.* |
| A. No. of learners who earned 80% of the evaluation | |
| B. No. of learners who require additional activities for remediation who scored below 80% | |
| C. Did the remedial lesson work? No. of learners who have caught up with the lesson. | |
| D. No. of learners who continue to require remediation | |
| E. Which of my teaching strategies worked well? Why did these work? | |
| F. What difficulties did I encounter which my principal or supervisor can help me solve? | |
| G. What innovation or localized materials did I | |

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| use/ discover which I wish to share with other teachers | |

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