**LESSON DEVELOPMENT TWO**

**SQUARE ROOT OF WHOLE NUMBERS**

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| **STAGE/TIME** | **TEACHER’S ACTIVITIES** | **LEARNER'S ACTIVITIES – MIND/HANDS ON** | **LEARNING POINTS** |
| **Step 1****Introduction** **(5 minutes)** | Guide the pupils to express the following numbers as a product of the same numbers – 4. 9, 16, 25 and 100.Teacher’s remark – Square root of a squared number is written as √4 = √(2^2) = (2 x 2) = 2. The square root is √ .  | 4 = 2 x 2 9 = 3 x 3 16 = 4 x 425 = 5 x 5100 = 10 x 10Listen to the teacher’s remark and lesson’s introduction – Square of Whole Numbers Up to 50. | Linking the Previous knowledge to the new lesson  |
| **Step 2** **Development** **(5 minutes)** **Grouping** | 1. Groups the learners into four groups – A, B, C, and D. 2. Guide the learners to choose a leader and secretary for your group. 3. Gives each group learning materials – square roots chart.  | 1. Belong to a group. 2. Choose their leader and secretary. 3. Received learning materials for their group.  | Learner’s group, leader and secretary confirmed. |
| **Step 3****Development****(10 minutes)** | Guide the pupils to find the square of the following numbers - 4. 9, 16, 25 and 100. | √4 **=** √(2 x 2) = 2√9 = √(3 x 3) = 3√25 = √(5 x 5) = 5√100 = √(10 x 10) = 10 | Square Root of Whole Numbers  |
| **Step 4****Development****(10 minutes)** | Guide the pupils to finding square roots by factorization method – 64 and 144 |

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| 2 | 64 |
| 2 | 32 |
| 2 | 16 |
| 2 | 8 |
| 2 | 4 |
| 2 | 2 |
|  | 1 |

64 = 2 x 2 x 2 x 2 x 2 x 2= √(2 x 2) x √(2 x 2) x √(2 x 2)= 2 x 2 x 2 = 8√64 = √(8 x 8) = 8 | Evaluation  |
| **Step 4** **Development****(5 minutes)** | Wrap up.  | Groups work.  | Groups Evaluation  |
| **Step 5****Development** **(5 minutes)**  | Asks each group to present their answers so that you can compare responses with those of other groups.Call on one or two groups for presentation. | Presentation  | Presentation   |
| **Step 6****Conclusion****(5 minutes)** | To conclude the lesson, the teacher revises the entire lesson and ask the key questions.  | The learners listen, ask and answer questions. | Lesson Conclusion  |

