**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 4  25 = 5 x 5  100 = 10 x 10  Listen 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 | |  |  | | --- | --- | | 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 |

