**LESSON DEVELOPMENT THREE**

**VOLUME OF SPHERE**

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| **STAGE/TIME** | **TEACHER’S ACTIVITIES** | **LEARNER'S ACTIVITIES – MIND/HANDS ON** | **LEARNING POINTS** |
| **Step 1****Introduction** **(5 minutes)** | Lets the pupils identify and describe a ball, oranges and globe (if available). Lets them know that objects like a ball, an orange, etc. are refer as sphere.  | Pupils identify and describe ball and orange as round surface. Pupils understand a ball and an orange as a sphere.  | Linking Previous knowledge to the lesson.  |
| **Step 2** **Development** **(5 minutes)** **Grouping** | 1. Groups the pupils into four groups – A, B, C, and D. 2. Guide the pupils to choose a leader and secretary for your group. 3. Gives each group learning materials – tin of milk, tomato and milo.  | 1. Belong to a group. 2. Choose their leader and secretary. 3. Received learning materials for their group.  | Pupil’s group, leader and secretary confirmed. |
| **Step 3****Development** **(5 minutes)** | Introduces the formula for the volume of sphere –A sphere with radius ***r*** has volume 4/3 π r^3 | Pupils study and interprete the volume as V = 4/3 x 22/7 x r x r x r | Formula for the volume of sphere  |
| **Step 4** **Development** **(5 minutes)** | Guides pupils find the volume of – Calculate the volume of each of these spheres. 1. Radius 21 cm 2. Radius 3 cm  | V = 4/3 π r^3Solution 1 – r = 21 cmV = 4/3 x 22/7 x 21 cm x 21 cm x 21 cm= 4 X 22 x 21 cm x 21 cm x 1 cm= Solution 2 - r = 3 cmV = 4/3 x 22/ 7 x 3 cm x 3 cm x 3 cm= 4 X 22/ 7 x 3 cm x 3 cm x 1 cm= 113.14 cm ^3 | Working examples  |
| **Step 5****Development****(15 minutes)** | Guides pupils to apply the formula for volume of sphere to find –1. Radius 6 cm 2. Radius 10 cm 3. Diameter 14 cm | Pupils working  | Working Exercise  |
| **Step 6****Conclusion/Evaluation** **(5 minutes)** | To conclude the lesson, the teacher revises the entire lesson and links it to the next lesson, and asks the key questions. | Listen, ask and answer questions  | Conclusion |