**COORDINATING TEACHER’S NAME: NDUKWE EMMANUEL OKORIE**

**SUBJECT: MATHEMATICS**

**CLASS: SSS 2**

**TELEPHONE NUMBER OF COORDINATING TEACHER: 07034676787,08185540934.**

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| **Week** | **Topics** | **Contents** | **Behavioral Objectives** | **Practice Questions** |
| 1 | Trigonometry | i. Bearing and distance  ii. Angle of elevation and depression | By the end of the lesson students should be able to solve life problems involving (i) angle of elevation and depressing (ii) bearing and distance. | -From a point on the edge of the sea. One ship is 5 km away on a bearing S500E and another is 2 km away on a bearing S600W. How far are these apart?  -A man walks due west for 4 km. He then changes direction and walks on a bearing of 1970 until he is south-west of his starting point. How far is he from then from his starting point?  -An aeroplane flies from A and B from a port P are 2250 and 1160 respectively. Ship A is 3.9 km from ship B on a bearing of 2580 . Calculate the distance of the ship A from P.  -From an aeroplane in the air at a horizontal distance of 1050m, the angles of depression of the top and base of a control tower at an instance are 360 and 410 respectively. Calculate, correct to the nearest metres, the:  a. height of the control tower  b. shortest distance between the aeroplane and the base of the control tower? |
| 2 | Probability | i. Combined probability  ii. Experimental probability  iii. Theoretical probability  iv. Mutually exclusive event  v. Tree diagrams and outcome tables | By the end of the lesson students should be able to solve problems on combination, Experimental, Theoretical, Mutually exclusive probabilities . | -A box contains ten marbles, Seven of which are black and three are red. Three marbles are drawn one after the other without replacement. Find the probability of choosing.  a. one red, one black and one red marble (in that order)  b. two black marbles  c. at least two black marbles  d. at most two black marbles.  -A coin is tossed three times. What is the probability of getting  a. two heads and one tail  b. at least one head?  -It is assumed that when children are born they are equally likely to be boys or girls. What is the probability that a family of four children contains  a. three boys and one girl  b. two boys and two girls |
| 3 | General Arithmetics | i. Sequence  ii. Arithmetic progression ii. Arithmetic progression  iii. Geometric progression  iv.Series | By the end of the lesson students should be able to solve problems for arithmetic progression and geometric progression. | -The 18TH term of an arithmetic progression 25. Find its first term if its common difference if its common difference is 2.  - The first and last terms of an AP are 6.7 and 17.1 respectively. If there are 14 terms in the sequence, find its common difference.  - Three numbers from a GP. If the first and third numbers are 5 and 245 respectively, find two possible values for the middle number.  -A GP has a first term of a, a common ratio of r and its 6 th term is 768. Another GP has a first term of a, a common ratio of 6r and its 3rd term is 3456. Evaluate a and r. |
| 4 | Surds | i. Simplification of surds  ii. Addition, multiplication ,subtraction and division of surds  iii. Rationalization of surds | By the end of the lesson students should be able to solve simple problems to surd operation. | Solve the followings:   1. ( - ) 2. 5 - 3 + 4 |