FIRST TERM
WEEKLY LESSON NOTES
WEEK 3

Week Ending: 27-01-2023		DAY:		Subject: Mathematics
Duration: 60MINS				Strand: Number
Class: B8		Class Size:		Sub Strand: Significant Figures
Content Standard: B8.1.1.1 Demonstrate understanding and the use of place value for expressing quantities in standard form and rounding numbers.		Indicator: 8.1.1.1.5 Express integers in a given number of significant and decimal places		Lesson: 1 of 1
Performance Indicator: Learners can express integers in a given number of significant and decimal places			Core Competencies: Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)	
References: Mathematics Curriculum Pg. 90				

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners on the previous lesson. Share performance indicators with learners and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Revise with learners on place value of numbers. Guide learners to explain what a significant figure is. As you read a figure from left to right, the first value you come to that is not zero has the highest place value, so it is called the first significant figure (s.f.), For example, in the number 4078; 4 is the first significant figure, 0 is the second significant figure and so on... Also, in the number 0.00507; 5 is the first significant figure since it is the first non-zero figure reading from left to right. The 0 after 5 is the 2 significant figure and 7 is the 3" significant figure. To correct a number to a stated number of significant figures • find the last significant figure you want • then look at the next significant figure (to the right) • If this figure is less than 5 leave the last significant figure you want as it is If this figure is 5 or more add 1 to the last significant figure you want. Guide learners to express any given integer to a given number of significant figures. (i) Express 56734 correct to two significant figures. Solution a) The 2nd significant figure is 6 but the figure after it (i.e. the 3rd significant figure) is 7 which is more than 5. Therefore we add 1 to 6 to give 7 as the 2nd significant figure. 56734 = 57000 (to 2 significant figures) <u>Assessment</u>	Counters, bundle and loose straws base ten cut square, Bundle of sticks

	Express 975.8674, correct to (i) two decimal places; (ii) three decimal places	
PHASE 3: **REFLECTION**	Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson. Take feedback from learners and summarize the lesson. <u>Home Work</u> Correct each of the following numbers to 2 significant figures. a) 0.0496 b) 0.0996	

Week Ending: 27-01-2023	DAY:	Subject: Mathematics
Duration: 60MINS		Strand: Number
Class: B8	Class Size:	Sub Strand: Standard Form

Content Standard: B8.1.1.1 Demonstrate understanding and the use of place value for expressing quantities in standard form and rounding numbers and decimals to significant figures and a given number of decimal places	Indicator: B8.1.1.1.4 Express integers of any size into standard form.	Lesson: 2 of 2
Performance Indicator: Learners can express integers of any size into standard form	Core Competencies: Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)	
References: Mathematics Curriculum Pg. 91		

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Start the lesson with a recap of the previous lesson. Allow learners to reflect on what they learnt from the previous lesson and the homework relating to significant. Learners work these examples in groups. Correct the following to; i) 4 ii) 3 iii) 2 iv) 1 • 17300 • 0.651234 • 782001 • 0.423568 • 20023 • 0.24780021 Share performance indicators with learners and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Brainstorm learners for meaning of standard form. It is a way of writing down very large or very small numbers easily. Guide learners to write numbers in standard form. $\left(\begin{array}{c}a\ number\ between\\ 1\ and\ 10\end{array}\right) * \left(\begin{array}{c}an\ integer\ power\\ of\ 10\end{array}\right)$ Therefore $a * 10^n$ is in the standard form, where $1 \leq a < 10$ and n is an integer. The value of n in the standard form shows whether the number is greater than 1 or is a fraction. Revise with learners to write integers as a power of 10: $1 = 10^0$ $10 = 10^1$ $100 = 10^2$ $1000 = 10^3$	Counters, bundle and loose straws base ten cut square, Bundle of sticks

| | Guide learners to write multiples of 10 in standard form:
(I) $10 = 1 \times 10$
(II) $100 = 1 \times 10^1$
(III) $1000 = 1 \times 10^3$ etc.

Guide learners to write integers in standard form:
Example 1: $26 = 2.6 \times 10$
2.6×10 is in standard form but 26×10 is not in standard form because 26 is not between 1 and 10.

Example 2: $375 = 3.75 \times 10^2$
3.75×10^2 is in standard form but 37.5×10^2 is not in standard form because 37.5 is not between 1 and 10.

Have learners practice in groups to write the following integers in standard form
(i) 8,765,049   (ii) 872   (iii) 460000

Take learners through the rules of writing numbers in standard form.
If n is positive, the number is 10 or more.
Example $4.6 \times 10^6 = 460000$
if n is zero, the number is between 1 and 10
example $5.6 \times 10^0 = 5.6$
if n is negative, the number is a fraction.
Example: $3 \times 10^{-1} = 0.3$

<u>Assessment</u>
Write these integers in standard form
   1. 234
   2. 0.03456778
   3. 97864064
   4. 0.0001234787 | |
| **PHASE 3:
REFLECTION** | Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.

Take feedback from learners and summarize the lesson. | |