

**FIRST TERM
WEEKLY LESSON NOTES
WEEK 10**

REVISION AND END OF TERM ASSESSMENT

Week Ending: 17-03-2023	DAY:	Subject: Mathematics
Duration: 60MINS		Strand: Strands for the term
Class: B8	Class Size:	Sub Strand: Sub strands for the term
Content Standard: Demonstrate knowledge and understanding in the topics treated so far.		Indicator: Recall and summarize all what they have learnt within the term
		Lesson: 1 of 2
Performance Indicator: Learners can recall and summarize all what they have learnt within the term		Core Competencies: Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)
References: Mathematics Curriculum Pg. 98		
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	<p>The laws of indices are a set of rules that govern how we can manipulate expressions involving powers of numbers. These rules are:</p> <p>1. Product rule: $a^m * a^n = a^{(m+n)}$ This rule tells us that when we multiply two numbers with the same base, we can add their exponents to get the exponent of the result. Example: $2^3 \times 2^4 = 2^{(3+4)} = 2^7 = 128$</p> <p>2. Quotient rule: $a^m / a^n = a^{(m-n)}$ This rule tells us that when we divide two numbers with the same base, we can subtract their exponents to get the exponent of the result. Example: $5^8 / 5^3 = 5^{(8-3)} = 5^5 = 3125$</p> <p>3. Power rule: $(a^m)^n = a^{(m*n)}$ This rule tells us that when we raise a number to a power and then raise the result to another power, we can multiply the exponents to get the exponent of the final result. Example: $(3^4)^2 = 3^{(4*2)} = 3^8 = 6561$</p> <p>4. Negative exponent rule: $a^{(-m)} = 1/a^m$ This rule tells us that when we have a negative exponent, we can flip the base and make the exponent positive to get the reciprocal of the result. Example: $2^{-5} = 1/2^5 = 1/32$</p> <p>5. Zero exponent rule: $a^0 = 1$ This rule tells us that any number raised to the power of zero is equal to one. Example: $7^0 = 1$</p>	Counters, bundle and loose straws base ten cut square, Bundle of sticks

	<p>Using these rules, have learners simplify and evaluate expressions involving powers of numbers. Here are a few examples: Example 1: Simplify $4^3 * 4^5$ Using the product rule, we can add the exponents: $4^3 * 4^5 = 4^{(3+5)} = 4^8 = 65536$</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> 1. Using the power rule, Evaluate $(2^4)^3$ 2. Using the quotient rule, Simplify $3^5 / 3^2$ 3. Using the negative exponent rule, Simplify $5^{(-2)}$ 4. Using the zero exponent rule, Simplify 2^0 	
<p>PHASE 3: REFLECTION</p>	<p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>	

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Duration: 60MINS		Strand: Strands treated for the term
Class: B8	Class Size:	Sub Strand: Sub strands for the term
Content Standard: Demonstrate knowledge and understanding in the topics treated so far.		Indicator: Preparation towards vacation
		Lesson: 1 of 1
Performance Indicator: Learners can answer all end of term assessment questions in their exercise books.		Core Competencies: Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)
References: Mathematics Curriculum Pg. 101		
Phase/Duration	Learners Activities	Resources
PHASE 1: STARTER	Ask learners to bring and display all the materials needed for the assessment. Educate them on the consequences of examination mal practice.	Exercise books, pen, pencils, erasers, Answer sheets.
PHASE 2: NEW LEARNING	Engage learners to arrange themselves properly to sit for the assessment test. Mark learners answer sheets or exercise books. Fill in learner's SBA books and report cards. Distribute learners answer sheets or exercise books for feedback.	SBA, Assessment Questions and exercise books.