

# FIRST TERM

## WEEKLY LESSON NOTES

### WEEK 3

<b>Week Ending:</b> 20-10-2023	<b>DAY:</b>	<b>Subject:</b> Mathematics
<b>Duration:</b> 60MINS		<b>Strand:</b> Number
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Number Operations
<b>Content Standard:</b> B.9.1.2.1 Apply mental mathematics and properties to determine answers for addition and subtraction of basic facts.	<b>Indicator:</b> B9.1.2.1.1 Multiply and divide given numbers by powers of 10 including decimals and benchmark fractions	<b>Lesson:</b> 1 of 1
<b>Performance Indicator:</b> Learners can multiply and divide given numbers by powers of 10		<b>Core Competencies:</b> Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)
<b>References:</b> Mathematics Curriculum Pg. 168		
<b>Key words:</b> Decimal, Benchmark Fractions, Percentage, and Product.		
<b>Phase/Duration</b>	<b>Learners Activities</b>	<b>Resources</b>
<b>PHASE 1: STARTER</b>	<p>Ask learners to think of a two-digit number.</p> <p>Ask them to multiply that number by 10 and observe what happens. Discuss as a class</p> <p>Share performance indicators and introduce the lesson.</p>	
<b>PHASE 2: NEW LEARNING</b>	<p>Remind learners of the importance of knowing multiplication facts and related division facts.</p> <p>Give learners a quick multiplication quiz, asking them to solve multiplication problems mentally or with the help of multiplication tables.</p> <p>Discuss the correct answers and address any questions or difficulties that arise.</p> <p>Explain the concept of multiplying or dividing by powers of 10 by using examples and real-world scenarios.</p> <p>Write this on the Multiply 0.25 by 10 and guide learners provide a step by step solution.</p> <p><b>Step 1: Understand the decimal places.</b> <i>0.25 is read as twenty-five hundredths. It means there are two digits after the decimal point.</i></p> <p><b>Step 2: Multiplying by 10 effectively shifts each digit in the number to the left by one place. This is equivalent to moving the decimal point one place to the right. The number of the zeros determines the number of shift.</b></p>	Counters, bundle and loose straws base ten cut square, Bundle of sticks

	<p><b>Step 3: Let's do the shifting.</b>  Original number: 0.25  Shift the decimal point to the left by one place: 2.5</p> <p>Therefore when you multiply 0.25 by 10, you get 2.5.</p> <p>Demonstrate how moving the decimal point in a number corresponds to multiplying or dividing by powers of 10.</p> <ul style="list-style-type: none"> <li>• <math>(1.00 \times 10 = 10.00)</math>. Note how the decimal point moved one place to the right.</li> <li>• <math>(1.00 \times 100 = 100.00)</math>. Note how the decimal point moved two places to the right.</li> <li>• <math>(1.00 \div 10 = 0.10)</math>. Note how the decimal point moved one place to the left.</li> <li>• <math>(1.00 \div 100 = 0.01)</math>. Note how the decimal point moved two places to the left.</li> </ul> <p>Provide a simple practice problems on the board.</p> <p>Introduce benchmark fractions such as <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{10}</math>, etc., and their decimal and percentage equivalents.</p> <p>Show benchmark fraction cards with their corresponding decimals or percentages and discuss their significance and uses.</p> <p>Give learners opportunities to practice converting benchmark fractions to decimals or percentages, and vice versa.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>Multiply 0.25 by 10.</li> <li>Convert <math>\frac{3}{5}</math> into a decimal.</li> <li>Divide 120 by 10.</li> <li>Express 40% as a decimal.</li> </ol>	
<p>PHASE 3:  <b>REFLECTION</b></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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<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Number Operations
<b>Content Standard:</b> B.9.1.2.1 Apply mental mathematics and properties to determine answers for addition and subtraction of basic facts.	<b>Indicator:</b> B.9.1.2.1.2 Demonstrate the ability to determine commutative properties of addition and multiplication	<b>Lesson:</b> 1 of 1
<b>Performance Indicator:</b> Learners can apply the commutative property of addition by recognizing that for any two numbers a and b, $a + b = b + a$ .		<b>Core Competencies:</b> Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)
<b>References:</b> Mathematics Curriculum Pg. 168		
<b>New words:</b> Commutative, Property, Addition, Multiplication		
<b>Phase/Duration</b>	<b>Learners Activities</b>	<b>Resources</b>
<b>PHASE 1: STARTER</b>	<p>Announce two numbers (e.g., 4 and 7). Ask the class to quickly add the numbers in the order given (<math>4 + 7</math>). Write the result on the board.</p> <p>Challenge them to reverse the numbers and add again (<math>7 + 4</math>). Write this result beside the first. Repeat the activity with multiplication.</p> <p>Share performance indicators and introduce the lesson.</p>	
<b>PHASE 2: NEW LEARNING</b>	<p>Display the commutative property of addition on the chart paper or board: <math>a + b = b + a</math>.</p> <p>Explain that the commutative property of addition tells us that when we add two numbers, it doesn't matter which order they're added in; the sum remains the same.</p> <p>Provide a few examples on the board to illustrate the commutative property, such as adding <math>2 + 3</math> and <math>3 + 2</math>, or <math>7 + 4</math> and <math>4 + 7</math>.</p> <p>Emphasize that the sum stays the same regardless of the order.</p> <p>Write simple addition problems on the board, such as <math>3 + 5</math>, <math>6 + 2</math>, <math>9 + 1</math>, and <math>4 + 7</math>.</p> <p>Learners in groups to solve the problems and determine if the commutative property holds true by swapping the order of the addends.</p> <p>Circulate the classroom to provide assistance and monitor progress.</p> <p>Create few additional problems on the board. Ask learners to solve the problems individually and write a sentence for each problem, explaining how they know the commutative property is true.</p> <p>Encourage them to use mathematical language and clear reasoning in their explanations.</p>	Counters, bundle and loose straws base ten cut square, Bundle of sticks

	<p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. Evaluate the commutative property of addition for the numbers 8 and 6.</li> <li>2. True or false: The order of the addends affects the sum in addition.</li> <li>3. Solve <math>12 + 4</math>. Is the sum the same as <math>4 + 12</math>? Explain why.</li> <li>4. Create an addition problem that obeys the commutative property. Solve it and explain your thinking.</li> </ol>	
<p>PHASE 3: <b>REFLECTION</b></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>	