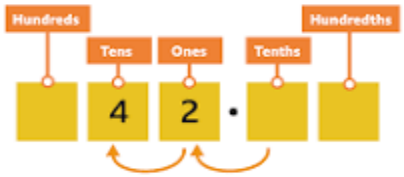
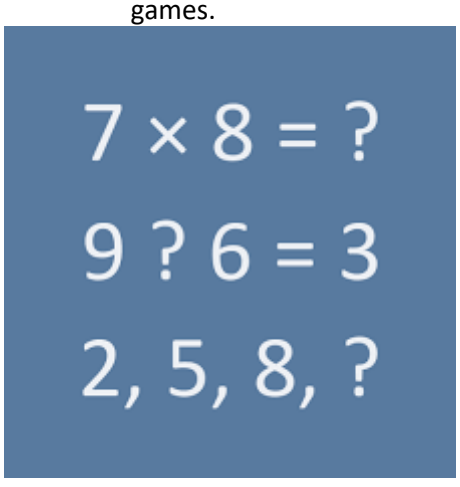
BASIC 7

WEEKLY LESSON PLAN – WEEK 3

Strand:	Number		**Sub-Strand:**	Number Operations	
Content Standard:	B7.1.2.1 Apply mental mathematics strategies and number properties used to solve problems				
Indicator (s)	B7.1.2.1.1 Multiply and divide given numbers by multiples of 10 including decimals and benchmark fractions B7.1.2.1.2 Apply mental mathematics strategies and number properties used to do calculation		**Performance Indicator:** Learners can multiply and divide given numbers by multiples of 10.		
Week Ending	27-09-2024				
Class	B.S.7	**Class Size:**		**Duration:**	
Subject	Mathematics				
Reference	Mathematics Curriculum, Teachers Resource Pack, Learners Resource Pack				
Teaching / Learning Resources	Video showing converting fractions to decimals, Pictures.		**Core Competencies:**	• Exhibit strong memory, intuitive thinking; and respond appropriately • Ability to merge simple/ complex ideas to create novel situation or thing	

DAY/DATE	**PHASE 1 : STARTER**	**PHASE 2: MAIN**	**PHASE 3: REFLECTION**
TUESDAY	Learners brainstorm to recite the multiples of 10.	1. Assist Learners to multiply given numbers by multiples of 10. 2. Learners in small groups to recall multiplication facts up to 144 and related division facts. 3. Demonstrate converting fractions to decimals and decimals to fractions. 4. Assist Individual Learners to convert fractions to decimals and decimals to fractions.  • Multiplying decimals by 10. To multiply by 10, you move the digits one place value to the left. • Multiplying by 100. To multiply by 100, you move the digits two places to the left. 3.12 x 100 = 312. • Multiplying by 1000. To multiply by 1000, you move the digits three place value places to the	Learners practice finding the products of multiplying decimals by 10, 100 and 1000. **Exercise;** Calculate; i. 43.456 x 100 ii. 1.263 x 10 iii. 506.102 x 1000 iv. 10.345 x 100 v. 1.34 x 10

		left.	
THURSDAY	Demonstrate using the halving and doubling techniques in multiplication.	1. Assist Learners to apply the halving and doubling technique to determine the product of two given numbers. 2. Discuss with Learners how to use distributive property to calculate for the product of two given numbers. 3. Learners brainstorm to use distributive property to determine the products of two numbers. **Multiplying using the half and double method** When you're faced with a multiplication like: **4 x 16 = ?** You have a number of methods to use: 1. Short Multiplication - the written method we all learned at school - here's a video to remind you 2. The Grid Method as discussed in this article 3. The Distributive Law - which sounds scary but basically means "splitting" it into two easy multiplications - so 4 x 16 becomes (4 x 10) + (4 x 6) 4. Or sometimes, such as in this example, it's just perfect for the half and double method Using the half and double method, we can halve one side of the multiplication as long as we double the other - and the answer remains the same. So, **4 x 16** becomes:	Through questions and answers, conclude the lesson.

		8 x 8 = 64 Here is another example which looks a little tricky at first: **34 x 5 = ?** But after using the half and double method it becomes: **17 x 10 = 170** The method also works very well with some fractions like this: **3½ x 12 = ?** Doubling removes the fraction so it becomes: **3½ x 12 = 7 x 6 = 42** Likewise with decimals: **4.5 x 8 = 9 x 4 = 36**	
FRIDAY	Discuss with Learners examples of mental mathematics games.	1. Demonstrate how to play mental mathematics games to make simple addition, subtractions and multiplications. 2. Assist Learners to play mental mathematics games.  i. addition through words like - plus, add, calculate the sum, increase a number by, and find the total;	Reflect on using mental mathematics games. **Exercise;** Calculate; i. What is the cost of 1 dozen of eggs at 80 pesewas each? ii. 8 x 99. iii. 28 x 25. iv. How many 21cm pieces can I cut off a string one metre long? v. What fraction of a litre is 250ml?

		ii. subtraction from words like - minus, from a number take, minus, find the difference, and what must be added to make; iii. multiplication through words like - times, multiply, find the product, square, and what must be divided by … to give …; iv. division through words like - divide, share, how many times does it go into? and what must be multiplied by … to give	vi. The area of a square board is 81 cm2. What is its perimeter? vii. Two angles of a triangle add up to 98o. What is the size of the third angle? viii. How many minutes from 10.15 a.m. to noon

Name of Teacher: **School:** **District:**