FIRST TERM
WEEKLY LESSON NOTES
WEEK 9

Week Ending: 30-11-2023	**DAY:**	**Subject:** Mathematics	
Duration: 100MINS		**Strand:** Number	
Class: B9	**Class Size:**	**Sub Strand:** Fractions, Decimals and Percentages	
Content Standard: B9.1.3.1 Apply the understanding of operations on fractions to solve problems involving fractions of given quantities and round the results to given decimal and significant places	**Indicator:** B9.1.3.1.2 Add and/or subtract, multiply and/or divide given fractions, using the principle of order of operations including the use of the BODMAS or PEMDAS rule, and apply the understanding of these to solve problems.		**Lesson:** 1 of 2
Performance Indicator: Learners can add, subtract, multiply, and divide given fractions using the principles of the order of operations (BODMAS or PEMDAS).		**Core Competencies:** Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)	
References: Mathematics Curriculum Pg. 170			
New words: Fractions, Numerator, Denominator, Operations			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Begin the lesson with a quick review of the order of operations (BODMAS or PEMDAS). Write a simple expression on the board, such as 3 + 5 x 2, and ask learners to solve it. Discuss their solutions and introduce the concept of performing operations in a specific order. Share performance indicators and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Divide the class into small groups. Provide each group with fraction cards and ask them to create and solve different fraction expressions using addition, subtraction, multiplication, and division. Emphasize the importance of following the order of operations. Walk around the class, offering guidance and clarification as needed. Introduce expressions involving both whole numbers and fractions. Write a few examples on the board and solve them together as a class. Discuss the steps involved and the application of the order of operations. Example: Solve $\frac{3}{5} + 2$ <u>Solution</u>	Fraction cards

	Convert the whole number 2 to a fraction with the same denominator as $\frac{3}{5}$. In this case, the denominator is 5. $\frac{2}{1} * \frac{5}{5} = \frac{10}{5}$ *Now that both fractions have the same denominator, you can add their numerators.* $\frac{3}{5} + \frac{10}{5} = \frac{13}{5}$ *So,* $\frac{3}{5} + 2 = \frac{13}{5}$ Write questions with expressions that involve fractions and whole numbers on the board and let learners solve in pairs. Guide learners through the process of solving these expressions step by step. Encourage peer collaboration and discussions. Emphasize the importance of simplifying fractions before performing other operations. <u>Assessment</u> 1. $\frac{3}{5} + 2$ 2. $\frac{4}{3} * \frac{3}{7}$ 3. $2 - \frac{1}{4} / \frac{1}{2}$ 4. $\frac{5}{6} * (3 + \frac{1}{2})$	
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.	

Week Ending: 30-11-2023	**DAY:**	**Subject:** Mathematics	
Duration: 100MINS		**Strand:** Number	
Class: B9	**Class Size:**	**Sub Strand:** Fractions, Decimals and Percentages	
Content Standard: B9.1.3.1 Apply the understanding of operations on fractions to solve problems involving fractions of given quantities and round the results to given decimal and significant places	**Indicator:** B9.1.3.1.2 multiply and/or divide given fractions, using the principle of order of operations including the use of the BODMAS or PEMDAS rule, and apply the understanding of these to solve problems.		**Lesson:** 2 of 2
Performance Indicator: Learners can use the order of operations (BODMAS or PEDMAS) to simplify expressions involving fractions with more than two operations.		**Core Competencies:** Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)	
References: Mathematics Curriculum Pg. 170			
New words: Fractions, Equivalent fractions, Simplest form, Mixed number			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Begin the lesson with a quick review of the order of operations (BODMAS or PEDMAS). Write a simple expression on the board, such as $\frac{3}{5}$ +2×4, and ask learners to solve it. Discuss their solutions and introduce the concept of performing operations in a specific order. Share performance indicators and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Divide the class into small groups. Provide each group with fraction cards and index cards containing expressions with multiple operations. Ask each group to work together to simplify the expressions, focusing on following the order of operations. Encourage discussions and collaboration within the groups. Invite each group to present their solutions to the class. Discuss different approaches and highlight the importance of order when simplifying expressions with fractions and multiple operations. Write questions on the board with expressions involving fractions and multiple operations. Work through a few examples as a class, guiding learners through each step of the process. Example: Solve $\frac{2}{3} + \frac{1}{4} * 2 - \frac{1}{6}$ <u>Solution</u>	Index cards with expressions involving fractions and multiple operations

	• Multiplication $\frac{1}{4} * 2 = \frac{1*2}{4} = \frac{2}{4}$ • Addition and Subtraction (from left to right): $\frac{2}{3} + \frac{2}{4} - \frac{1}{6}$ • Find a common denominator (12 in this case): $\frac{8}{12} + \frac{6}{12} - \frac{2}{12}$ • Combine the fractions: $\frac{8}{12} + \frac{6}{12} - \frac{2}{12} = \frac{12}{12} = 1$ So, $\frac{2}{3} + \frac{1}{4} * 2 - \frac{1}{6} = 1$ Encourage learners to ask questions and discuss their reasoning. <u>Assessment</u> 1. $\frac{2}{3} + \frac{1}{4} * 2 - \frac{1}{6}$ 2. $\frac{3}{5} * \frac{2}{3} + \frac{1}{2}$ 3. $\frac{4}{7} - \frac{1}{2} / \frac{1}{4}$ 4. $\frac{1}{2} + \frac{3}{4} * \frac{2}{3} - \frac{1}{5}$	
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.	