Theme: Numbers and Numeration (M-07-001) **CODE: A1**	Theme: Numbers and Numeration (M-07-001) **CODE: A1**
Lesson Title: Concept and Vocabulary of Factors	Lesson Title: Concept and Vocabulary of Factors
What are **factors**? 1 minute	Answer: **Factors** are numbers that can go into another number without a remainder.
Theme: Numbers and Numeration (M-07-001) **CODE: A2**	Theme: Numbers and Numeration (M-07-001) **CODE: A2**
Lesson Title: Concept and Vocabulary of Factors	Lesson Title: Concept and Vocabulary of Factors
Look at this list of numbers: 0;24;48;8;13;2;40;1;14. Which numbers are factors of 24? 1½minutes	Answer: The factors of 24 are: 24 and 1
Theme: Numbers and Numeration (M-07-001) **CODE: A3**	Theme: Numbers and Numeration (M-07-001) **CODE: A3**
Lesson Title: Concept and Vocabulary of Factors	Lesson Title: Concept and Vocabulary of Factors
Find the factors of the following numbers: i. 18 ii. 30 iii. 32 4 minutes	Answer: i 1; 2; 3; 6; 9; 18 ii 1; 2; 3; 5; 6; 10; 15; 30 iii 1; 2; 4; 8; 16; 32
Theme: Numbers and Numeration (M-07-002) **CODE: A4**	Theme: Numbers and Numeration (M-07-002) **CODE: A4**
Lesson Title: Multiples of Whole Numbers	Lesson Title: Multiples of Whole Numbers
What is a **multiple**? 1½ minutes	Answer: A **multiple** of a given number can be divided exactly by that number; It is a number you get when you multiply a given number by any other whole number.

Theme: Numbers and Numeration (M-07-002)	CODE: A5
Lesson Title: Multiples of Whole Numbers	

i Write down the first 5 multiples of 11
ii Write down all multiples of 7 greater than 20 but less than 45

3 minutes

Theme: Numbers and Numeration (M-07-002)	CODE: A5
Lesson Title: Multiples of Whole Numbers	

Answer:

i 11, 22, 33, 44, 55
ii 32, 40, 48

Theme: Numbers and Numeration (M-07-002)	CODE: A6
Lesson Title: Multiples of Whole Numbers	

a What is a **prime number**?

b Is **1** a prime number?

2 minutes

Theme: Numbers and Numeration (M-07-002)	CODE: A6
Lesson Title: Multiples of Whole Numbers	

Answer:

a **Prime numbers** are numbers that have only two factors, 1 and the number itself.

b **NO**.
A prime number must be greater than 1.

Theme: Numbers and Numeration (M-07-003)	CODE: A7
Lesson Title: Factors of Whole Numbers	

Complete the following table:

Numbers	Factors	Prime factors
32		
35		
48		

4 minutes

Theme: Numbers and Numeration (M-07-003)	CODE: A7
Lesson Title: Factors of Whole Numbers	

Answer:

Numbers	Factors	Prime factors
32	1, 2, 4, 8, 16, 32	2
35	1, 5, 7, 35	5, 7
48	1, 2, 3, 4, 6, 8, 12, 16, 24, 48	2, 3

Theme: Numbers and Numeration (M-07-004)	CODE: A8
Lesson Title: Common Factors	

Explain the word '**common**' in relation to numbers.

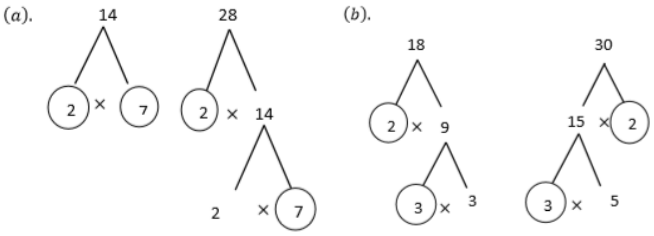
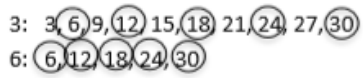
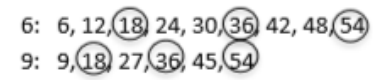
1½ minutes

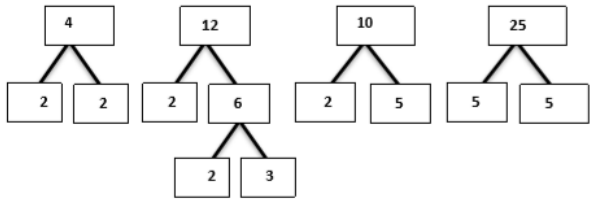
Theme: Numbers and Numeration (M-07-004)	CODE: A8
Lesson Title: Common Factors	

Answer:

'**Common**' means things or numbers found everywhere.

Theme: Numbers and Numeration (M-07-004) **CODE: A9**	Theme: Numbers and Numeration (M-07-004) **CODE: A9**
Lesson Title: Common Factors	Lesson Title: Common Factors
Complete the following sentence: When a number is a factor of two or more given numbers, it is called a _____? 1½ minutes	Answer: When a number is a factor of two or more given numbers, it is called a **common factor**.
Theme: Numbers and Numeration (M-07-004) **CODE: A10**	Theme: Numbers and Numeration (M-07-004) **CODE: A10**
Lesson Title: Common Factors	Lesson Title: Common Factors
Below are four pairs of numbers: a. 6 and 12 b. 5 and 10 c. 8 and 20 d. 9 and 15 Find the common factors for the pairs of numbers. Write down the factors of the numbers. 4 minutes	Answer: (a) 6: ①, ②, ③, ⑥ and 12: ①, ②, ③, 4, ⑥, 12 (b) 5: ①, ⑤ and 10: ①, 2, ⑤, 10 (c) 8: ①, ②, ④, 8 and 20: ①, ②, ④, 5, 10, 20 (d) 9: ①, ③, 9 and 15: ①, ③, 5, 15
Theme: Numbers and Numeration (M-07-005) **CODE: A11**	Theme: Numbers and Numeration (M-07-005) **CODE: A11**
Lesson Title: Highest Common Factor (HCF)	Lesson Title: Highest Common Factor (HCF)
What does the term '**Highest Common Factor**' (HCF) mean? 1½ minutes	Answer: The **HCF** (highest common factor) is the biggest number that is a factor of two or more numbers.
Theme: Numbers and Numeration (M-07-005) **CODE: A12**	Theme: Numbers and Numeration (M-07-005) **CODE: A12**
Lesson Title: Highest Common Factor (HCF)	Lesson Title: Highest Common Factor (HCF)
When do we use the **factor tree** method? 1½minutes	Answer: We use the **factor tree** method when we are trying to find the HCF of big numbers.

Theme: Numbers and Numeration (M-07-005) **CODE: A13**	Theme: Numbers and Numeration (M-07-005) **CODE: A13**
Lesson Title: Highest Common Factor (HCF)	Lesson Title: Highest Common Factor (HCF)
Use a factor tree to find the HCF of: a.) 14 and 28 b.) 18 and 30 4 minutes	Answer: 
Theme: Numbers and Numeration (M-07-006) **CODE: A14**	Theme: Numbers and Numeration (M-07-006) **CODE: A14**
Lesson Title: Common Multiples	Lesson Title: Common Multiples
Give the first five multiples of 5 1 minute	Answer: The first five multiples of 5 are: 5, 10, 15, 20, 25
Theme: Numbers and Numeration (M-07-006) **CODE: A15**	Theme: Numbers and Numeration (M-07-006) **CODE: A15**
Lesson Title: Common Multiples	Lesson Title: Common Multiples
List the first ten multiples of **3** and **5**. 3 minutes	Answer: The first ten multiples of 3 and 5 are: **3**: 3,6,9,12,15,18,21,24,27,30 **5**: 5,10,15,20,25,30,35,40,45,50
Theme: Numbers and Numeration (M-07-006) **CODE: A16**	Theme: Numbers and Numeration (M-07-006) **CODE: A16**
Lesson Title: Common Multiples	Lesson Title: Common Multiples
a. Find the first 5 common multiples of 3 and 6. b. Find the first 3 common multiples of 6 and 9. 4 minutes	Answer: a:  b: 

Theme: Numbers and Numeration (M-07-007) **CODE: A17**	Theme: Numbers and Numeration (M-07-007) **CODE: A17**
Lesson Title: Lowest Common Multiple (LCM)	Lesson Title: Lowest Common Multiple (LCM)
What does the term '**Lowest Common Multiple'** (LCM) mean? 1½ minutes	Answer: The **LCM** (Lowest Common Multiple) is the smallest positive number that is a multiple of two or more numbers.
Theme: Numbers and Numeration (M-07-007) **CODE: A18**	Theme: Numbers and Numeration (M-07-007) **CODE: A18**
Lesson Title: Lowest Common Multiple (LCM)	Lesson Title: Lowest Common Multiple (LCM)
a. Find the LCM of 4 and 12 b. Find the LCM of 10 and 25 4 minutes	Answer:  a. 4: 2×2 12: 2×2×3 LCM = 2×2×3 = 12 b. 10: 2×5 25: 5×5 LCM = 2×5×5 = 50
Theme: Numbers and Numeration (M-07-008) **CODE: A19**	Theme: Numbers and Numeration (M-07-008) **CODE: A19**
Lesson Title: Square of Whole Number	Lesson Title: Square of Whole Number
Find the values of: (a) 8 squared (b) 9 squared (c) 7 squared 3 minutes	Answer: (a) 82 = 8×8 = 64 (b) 92 = 9 ×9 = 81 (c) 72 = 7×7 = 49)
Theme: Numbers and Numeration (M-07-009) **CODE: A20**	Theme: Numbers and Numeration (M-07-009) **CODE: A20**
Lesson Title: Cubed Whole Numbers	Lesson Title: Cubed Whole Numbers
Find the values of: $a. 9^3$ $b. 3^3$ $c. 5^3$ 3 minutes	Answer: a. 9^3= 9×9×9 = 729 b. 3^3 = 3×3×3 = 27 c. 5^3 = 5×5×5 = 125

Theme: Numbers and Numeration (M-07-010) **CODE: A21**	Theme: Numbers and Numeration (M-07-010) **CODE: A21**
Lesson Title: Higher Powers of Whole Numbers	Lesson Title: Higher Powers of Whole Numbers
Simplify the following: (a) 6×6×6×6×6 (b) 7×7×7×7 (c) 3×3×3×3×3 Expand the following: (d) 2^5 (e)8^4 4 minutes	Answer: (a) 6^5 (b) 7^4 (c) 3^5 (d) 2×2×2×2×2 (e) 8×8×8×8
Theme: Numbers and Numeration (M-07-011) **CODE: A22**	Theme: Numbers and Numeration (M-07-011) **CODE: A22**
Lesson Title: Multiplying Two Indices	Lesson Title: Multiplying Two Indices
What is the value of the **power** and what is the value of the **base** in the expression below: 3^4 2 minutes	Answer: The **power** = 4 The **base** = 3
Theme: Numbers and Numeration (M-07-011) **CODE: A23**	Theme: Numbers and Numeration (M-07-011) **CODE: A23**
Lesson Title: Multiplying Two Indices	Lesson Title: Multiplying Two Indices
Complete the following sentence: When multiplying two indices with the same base, _____ 1½ minutes	Answer: When multiplying two indices with the same base, **simply add the powers**.
Theme: Numbers and Numeration (M-07-011) **CODE: A24**	Theme: Numbers and Numeration (M-07-011) **CODE: A24**
Lesson Title: Multiplying Two Indices	Lesson Title: Multiplying Two Indices
Identify the Law of Indices in the following expression: a^m x a^n = a^{m+n} 1 minute	Answer: It is the **first** law of indices.

Theme: Numbers and Numeration (M-07-011)	**CODE: A25**
Lesson Title: Multiplying Two Indices	
Simplify the following. Leave your answer in index form: (a) $4^2 \times 4$ (b) $2^3 \times 2^4$ 2 minutes	

Theme: Numbers and Numeration (M-07-011)	**CODE: A25**
Lesson Title: Multiplying Two Indices	
Answer: (a) $4^2 \times 4 = 4^2 \times 4^1 = 4^{2+1} = 4^3$ (b) $2^3 \times 2^4 = 2^{3+4} = 2^7$	

Theme: Numbers and Numeration (M-07-012)	**CODE: A26**
Lesson Title: Dividing Two Indices	
Complete the following sentence: When we divide two indices with the same base, _____ 1½minutes	

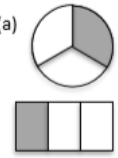
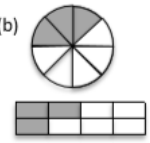
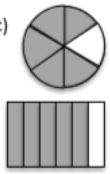
Theme: Numbers and Numeration (M-07-012)	**CODE: A26**
Lesson Title: Dividing Two Indices	
Answer: When we divide two indices with the same base, **we subtract the powers to get the answer**.	

Theme: Numbers and Numeration (M-07-012)	**CODE: A27**
Lesson Title: Dividing Two Indices	
Identify the Law of Indices in the following expression: $a^m \div a^n = a^{m-n}$ 1½ minutes	

Theme: Numbers and Numeration (M-07-012)	**CODE: A27**
Lesson Title: Dividing Two Indices	
Answer: It is the **second** law of indices.	

Theme: Numbers and Numeration (M-07-012)	**CODE: A28**
Lesson Title: Dividing Two Indices	
Simplify: i) $2^4 \div 2^2$ ii) $\frac{t^6}{t^3}$ 3 minutes	

Theme: Numbers and Numeration (M-07-012)	**CODE: A28**
Lesson Title: Dividing Two Indices	
Answer: i) $2^4 \div 2^2 = 2^{4-2} = 2^2$ ii) $\frac{t^6}{t^3} = t^6 \div t^3 = t^{6-3} = t^3$	

Theme: Numbers and Numeration (M-07-013) **CODE: A29**	Theme: Numbers and Numeration (M-07-013) **CODE: A29**
Lesson Title: Multiplication and Division of Indices	Lesson Title: Multiplication and Division of Indices
Simplify: (a) $\frac{3^2\times3^5}{3^4\times3}$ (b) $\frac{2^5\times2^4}{2^3\times2^2}$ (c) $\frac{6^2\times6^3}{6^4}$ 4 minutes	Answer: (a) $\frac{3^2\times3^5}{3^4\times3^1}=\frac{3^{2+5}}{3^{4+1}}=\frac{3^7}{3^5}=3^{7-5}=3^2$ (b) $\frac{2^5\times2^4}{2^3\times2^2}=\frac{2^{5+4}}{2^{3+2}}=\frac{2^9}{2^5}=2^{9-5}=2^4$ (c) $\frac{6^2\times6^3}{6^4}=\frac{6^{2+3}}{6^4}=\frac{6^5}{6^4}=6^{5-4}=6^1=6$
Theme: Numbers and Numeration (M-07-014) **CODE: A30**	Theme: Numbers and Numeration (M-07-014) **CODE: A30**
Lesson Title: Introduction to Fractions	Lesson Title: Introduction to Fractions
Draw shapes to show the following fractions: (a) $\frac{1}{3}$ (b) $\frac{3}{8}$ (c) $\frac{5}{6}$ 3 minutes	Answer: (a)  (b)  (c) 
Theme: Numbers and Numeration (M-07-015) **CODE: A31**	Theme: Numbers and Numeration (M-07-015) **CODE: A31**
Lesson Title: Introduction to Fractions	Lesson Title: Introduction to Fractions
i) Which fraction is bigger $\frac{4}{5}$ or $\frac{4}{6}$? ii) Put this list of fractions in ascending order (smallest first): $\frac{3}{9}, \frac{3}{11}, \frac{3}{5}, \frac{3}{7}$ iii) Put this list of fractions in descending order (largest first): $\frac{5}{6}, \frac{5}{11}, \frac{5}{8}, \frac{5}{9}$ 4 minutes	Answer: i) $\frac{4}{5}$ ii) $\frac{3}{11}, \frac{3}{9}, \frac{3}{7}, \frac{3}{5}$ iii) $\frac{5}{6}, \frac{5}{8}, \frac{5}{9}, \frac{5}{11}$
Theme: Numbers and Numeration (M-07-016) **CODE: A32**	Theme: Numbers and Numeration (M-07-016) **CODE: A32**
Lesson Title: Adding fractions with the same denominator	Lesson Title: Adding fractions with the same denominator
Write down the **numerator** and the **denominator** in the following fraction: $\frac{2}{13}$ 1½ minutes	Answer: The **numerator** is 2. The **denominator** is 13.

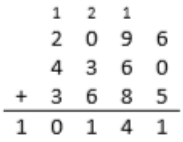
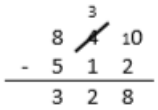
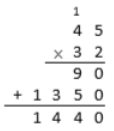
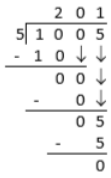
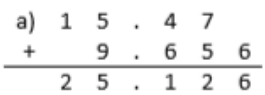
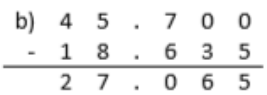
Theme: Numbers and Numeration (M-07-016) **CODE: A33**	Theme: Numbers and Numeration (M-07-016) **CODE: A33**
Lesson Title: Adding fractions with the same denominator	Lesson Title: Adding fractions with the same denominator
Complete the following sentence: When the fractions have the same denominator, _____ 1½ minutes	Answer: When the fractions have the same denominator, **we add the numerators and keep the same denominator.**
Theme: Numbers and Numeration (M-07-017) **CODE: A34**	Theme: Numbers and Numeration (M-07-017) **CODE: A34**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
Complete the following sentence: A fraction in which the denominator is bigger than the numerator is known as a _____ 1½ minutes	Answer: A fraction in which the denominator is bigger than the numerator is known as a **proper fraction**.
Theme: Numbers and Numeration (M-07-017) **CODE: A35**	Theme: Numbers and Numeration (M-07-017) **CODE: A35**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
Solve the problems below: (i) $\frac{2}{7} + \frac{5}{7}$ (ii) $\frac{2}{9} + \frac{2}{9}$ 3 minutes	Answer: (i) $\frac{2}{7} + \frac{5}{7} = \frac{2+5}{7} = \frac{7}{7} = 1$ (ii) $\frac{2}{9} + \frac{2}{9} = \frac{2+2}{9} = \frac{4}{9}$
Theme: Numbers and Numeration (M-07-017) **CODE: A36**	Theme: Numbers and Numeration (M-07-017) **CODE: A36**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
My mother gave me $\frac{3}{8}$ of a pawpaw, and my father gave me $\frac{2}{8}$ of a pawpaw. How much pawpaw do I have in total? 2 minutes	Answer: $\frac{3}{8} + \frac{2}{8} = \frac{3+2}{8} = \frac{5}{8}$

Theme: Numbers and Numeration (M-07-017) **CODE: A37**	Theme: Numbers and Numeration (M-07-017) **CODE: A37**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
Complete the following sentences: a) To subtract fractions with different denominators, we need to find a _____ b) To add fractions with different denominators, we need to find a _____ 2 minutes	Answer: a) To subtract fractions with different denominators, we need to find a **common denominator**. b) To add fractions with different denominators, we need to find a **common denominator**.
Theme: Numbers and Numeration (M-07-017) **CODE: A38**	Theme: Numbers and Numeration (M-07-017) **CODE: A38**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
Complete the following sentence: A fraction in which the denominator is bigger than the numerator is a _____ 1½ minutes	Answer: A fraction in which the denominator is bigger than the numerator is a **proper fraction**.
Theme: Numbers and Numeration (M-07-017) **CODE: A39**	Theme: Numbers and Numeration (M-07-017) **CODE: A39**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
Complete the following sentence: A fraction in which the denominator is smaller than the numerator is known as an _____ 1½ minutes	Answer: A fraction in which the denominator is smaller than the numerator is known as an **improper fraction**.
Theme: Numbers and Numeration (M-07-017) **CODE: A40**	Theme: Numbers and Numeration (M-07-017) **CODE: A40**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
Change the following improper fraction into a mixed fraction: $\frac{31}{30}$ 1½ minutes	Answer: $\frac{31}{30}$ = 31 ÷30 = $1\frac{1}{30}$

Theme: Numbers and Numeration (M-07-017) **CODE: A41**	Theme: Numbers and Numeration (M-07-017) **CODE: A41**
Lesson Title: Adding fractions with different denominators	Lesson Title: Adding fractions with different denominators
Solve the following problems: (i) $\frac{1}{4}+\frac{3}{5}$ (ii) $\frac{2}{5}+\frac{2}{3}$ 4 minutes	Answer: (i) $\frac{1}{4}+\frac{3}{5}=\frac{5}{20}+\frac{12}{20}=\frac{5+12}{20}=\frac{17}{20}$ (ii) $\frac{2}{5}+\frac{2}{3}=\frac{6}{15}+\frac{10}{15}=\frac{6+10}{15}=\frac{16}{15}=1\frac{1}{15}$
Theme: Numbers and Numeration (M-07-018) **CODE: A42**	Theme: Numbers and Numeration (M-07-018) **CODE: A42**
Lesson Title: Subtracting fractions with the same denominators	Lesson Title: Subtracting fractions with the same denominators
Solve the following problems: (a)  (b) $\frac{6}{7}-\frac{4}{7}$ (c) $\frac{10}{11}-\frac{6}{11}$ 4 minutes	Answer: (a) $\frac{3}{5}-\frac{1}{5}=\frac{2}{5}$ (b) $\frac{6}{7}-\frac{4}{7}=\frac{2}{7}$ (c) $\frac{10}{11}-\frac{6}{11}=\frac{4}{11}$)
Theme: Numbers and Numeration (M-07-019) **CODE: A43**	Theme: Numbers and Numeration (M-07-019) **CODE: A43**
Lesson Title: Subtracting fractions with different denominators	Lesson Title: Subtracting fractions with different denominators
Simplify: (i) $\frac{8}{9}-\frac{2}{3}$ (ii) A man shared $\frac{5}{6}$of his money between his 2 sons. If the first son received $\frac{3}{4}$ of his total money, what fraction of his money did his second son receive? 4 minutes	Answer: (i) $\frac{8}{9}-\frac{2}{3}=\frac{8}{9}-\frac{6}{9}=\frac{8-6}{9}=\frac{2}{9}$ (ii) $\frac{5}{6}-\frac{3}{4}=\frac{10}{12}-\frac{9}{12}=\frac{10-9}{12}=\frac{1}{12}$
Theme: Numbers and Numeration (M-07-020) **CODE: A44**	Theme: Numbers and Numeration (M-07-020) **CODE: A44**
Lesson Title: Multiplication of fractions	Lesson Title: Multiplication of fractions
Simplify: $\frac{1}{2}\times\frac{3}{8}\times\frac{2}{3}$ 3 minutes	Answer: $\frac{1}{2}\times\frac{3}{8}=\frac{1\times3}{2\times8}=\frac{3}{16}\rightarrow\frac{3}{16}\times\frac{2}{3}=\frac{6}{48}=\frac{1}{8}$

Theme: Numbers and Numeration (M-07-021) **CODE: A45**	Theme: Numbers and Numeration (M-07-021) **CODE: A45**
Lesson Title: Division of fractions	Lesson Title: Division of fractions
Simplify: a. $\frac{1}{2} \div \frac{2}{3}$ b. $\frac{6}{7} \div \frac{5}{6}$ 4 minutes	Answer: a. $\frac{1}{2} \div \frac{2}{3} = \frac{1}{2} \times \frac{3}{2} = \frac{3}{4}$ b. $\frac{6}{7} \div \frac{5}{6} = \frac{6}{7} \times \frac{6}{5} = \frac{36}{35} = 1\frac{1}{35}$
Theme: Everyday Arithmetic (M-07-022) **CODE: A46**	Theme: Everyday Arithmetic (M-07-022) **CODE: A46**
Lesson Title: Story problems on the basic operations on fractions	Lesson Title: Story problems on the basic operations on fractions
Solve the problems below: (i) Marie uses $\frac{1}{4}$ of her money to buy rice, and $\frac{3}{8}$ to buy palm oil. What fraction of her money is left? (ii) Bendu wants to buy enough rice for her family's dinner. Each member of her family eats $\frac{3}{4}$ cup of rice, and there are 8 members of her family. How many cups should she buy? 5 minutes	Answer: (i) $1-(\frac{1}{4}+\frac{3}{8}) = 1-(\frac{2}{8}+\frac{3}{8}) =$ $1-\frac{5}{8} = \frac{8}{8}-\frac{5}{8} = \frac{3}{8}$ (ii) $\frac{3}{4} \times 8 = \frac{3}{4} \times \frac{8}{1} = \frac{3\times8}{4\times1} = \frac{24}{4} = 6$ cups
Theme: Numbers and Numeration (M-07-024) **CODE: A47**	Theme: Numbers and Numeration (M-07-024) **CODE: A47**
Lesson Title: Decimals to fractions	Lesson Title: Decimals to fractions
Express the following as fractions in their lowest terms: a. 5.32 b. 0.325 c. 0.66 4 minutes	Answer: (a) $5.32 = 5\frac{32}{100} = 5\frac{8}{25}$ (b) $0.325 = \frac{325}{1000} = \frac{13}{40}$ (c) $0.66 = \frac{66}{100} = \frac{33}{50}$
Theme: Numbers and Numeration (M-07-025) **CODE: A48**	Theme: Numbers and Numeration (M-07-025) **CODE: A48**
Lesson Title: Fractions to decimals	Lesson Title: Fractions to decimals
Express the following fractions as decimals: a) $\frac{4}{5}$ b) $1\frac{19}{100}$ c) $39\frac{1}{2}$ 4 minutes	Answer: (a) $\frac{4}{5} = 0.8$ (b) $1\frac{19}{100} = 1.19$ (c) $\frac{1}{2} = 0.5 \rightarrow 39\frac{1}{2} = 39.5$

Theme: Numbers and Numeration (M-07-026) **CODE: A49**	Theme: Numbers and Numeration (M-07-026) **CODE: A49**
Lesson Title: Rounding off decimal numbers to whole numbers	Lesson Title: Rounding off decimal numbers to whole numbers
In a mathematics test, Amadu and Fatmata were asked to round 36.5 to the nearest whole number. Amadu's answer was 36 while Fatmata's was 37. Which of them is correct? Give reasons. 4 minutes	Answer: Fatmata's answer was correct because 0.5 can be rounded up by adding 1 to 36. This makes 36.5 become 37 when rounded to the nearest whole number.
Theme: Numbers and Numeration (M-07-027) **CODE: A50**	Theme: Numbers and Numeration (M-07-027) **CODE: A50**
Lesson Title: Rounding off decimal numbers	Lesson Title: Rounding off decimal numbers
Round to the number of decimal places given in brackets: (a) 7.263 (2) (b) 73.0448 (2) (c) 0.04168 (3) (d) 0.7208 (3) 4 minutes	Answer: (a) 7.263 → 7.26 (b) 73.0448 →73.04 (c) 0.04168 → 0.042 (d) 0.7208 →0.0721
Theme: Numbers and Numeration (M-07-028) **CODE: A51**	Theme: Numbers and Numeration (M-07-028) **CODE: A51**
Lesson Title: Rounding off whole numbers and decimals to nearest 10, 100 and 1000	Lesson Title: Rounding off whole numbers and decimals to nearest 10, 100 and 1000
(a) Round 6309 to nearest 10; (b) Round 9672.64 to nearest 100; (c) Round 5085.12 to nearest 1000. 3½ minutes	Answer: (a) 63⓪9 = 6310 (b) 9⑥72.64 = 9700.00 or 9700 (c) ⑤085.12 = 5000.00 or 5000. 5
Theme: Numbers and Numeration (M-07-029) **CODE: A52**	Theme: Numbers and Numeration (M-07-029) **CODE: A52**
Lesson Title: Multiplying and dividing whole numbers and decimals by powers of 10	Lesson Title: Multiplying and dividing whole numbers and decimals by powers of 10
Complete the following sentence: To multiply or divide decimals and whole numbers by powers of 10, we move the point to the_____ 1½ minutes	Answer: To multiply or divide decimals and whole numbers by powers of 10, we move the point to **the right for multiplication and to the left for division.**

Theme: Numbers and Numeration (M-07-029) **CODE: A53**	Theme: Numbers and Numeration (M-07-029) **CODE: A53**
Lesson Title: Multiplying and dividing whole numbers and decimals by powers of 10	Lesson Title: Multiplying and dividing whole numbers and decimals by powers of 10
Solve: (a) 7300÷100 (b) 5.38×1000 (c) 5.6÷ 10^2 3 minutes	Answer: (a) 73.00 = 73 (b) 5,380 (c) .056
Theme: Everyday Arithmetic (M-07-030) **CODE: A54**	Theme: Everyday Arithmetic (M-07-030) **CODE: A54**
Lesson Title: Review of the four operations with whole numbers	Lesson Title: Review of the four operations with whole numbers
Solve: (a) Add: 2096+4360+3685 (b) Subtract: 840−512 3 minutes	Answer: a) 2096 + 4360 +3685 →  b) 840−512 → 
Theme: Everyday Arithmetic (M-07-030) **CODE: A55**	Theme: Everyday Arithmetic (M-07-030) **CODE: A55**
Lesson Title: Review of the four operations with whole numbers	Lesson Title: Review of the four operations with whole numbers
Solve: (a) Multiply: 45×32 (b) Divide: 1005 ÷5 3 minutes	Answer: (a) 45×32 →  (b) 1005 ÷5 → 
Theme: Everyday Arithmetic (M-07-031) **CODE: A56**	Theme: Everyday Arithmetic (M-07-031) **CODE: A56**
Lesson Title: Review of addition and subtraction of decimals	Lesson Title: Review of addition and subtraction of decimals
Solve: (a) Add: 15.47+9.656 (b) Subtract 45.7−18.635 3 minutes	Answer:  

Theme: Everyday Arithmetic (M-07-032) **CODE: A57**	Theme: Everyday Arithmetic (M-07-032) **CODE: A57**
Lesson Title: Multiplying and dividing decimals	Lesson Title: Multiplying and dividing decimals
Solve: i) 1.341 ÷ 0.03 ii) 0.24 x 0.02 1½ minutes	Answer: i) 1.341 ÷ 0.03(1.341 x 100) ÷ (0.03 x 100) = 134.1 ÷ 3 = 44.7 44.7 3 | 134.1 - 12↓ ↓ 14↓ - 12↓ 21 21 0 ii) 0.24 × 0.02 048 000 000 0.0048
Theme: Everyday Arithmetic (M-07-033) **CODE: A58**	Theme: Everyday Arithmetic (M-07-033) **CODE: A58**
Lesson Title: Order of operations (BODMAS)	Lesson Title: Order of operations (BODMAS)
What do the letters of **BODMAS** stand for? 1½ minutes	Answer: BODMAS stands for 'brackets of division, multiplication, addition and subtraction'. **B** Brackets **O** Of **D** Division **M** Multiplication **A** And **S** Subtraction
Theme: Everyday Arithmetic (M-07-033) **CODE: A59**	Theme: Everyday Arithmetic (M-07-033) **CODE: A59**
Lesson Title: Order of operations (BODMAS)	Lesson Title: Order of operations (BODMAS)
Simplify: a. $5.1 \times (6.2 - 3)$ b. $7 \times 2^3 \div 4$ c. $15 \div 3 + 4^3$ 4 minutes	Answer: a. $5.1 \times (6.2 - 3) = 5.1 \times 3.2 = 16.32$ b. $7 \times 2^3 \div 4 = 7 \times 8 \div 4 = 7 \times 2 = 14$ c. $15 \div 3 + 4^3 = 15 \div 3 + 64 = 5 + 64 = 69$
Theme: Everyday Arithmetic (M-07-034) **CODE: A60**	Theme: Everyday Arithmetic (M-07-034) **CODE: A60**
Lesson Title: Estimation	Lesson Title: Estimation
(a) Round 63,194 to nearest Thousands; (b) Estimate 828 + 43 to the nearest Tens place (c) Estimate 23,489 – 2373 to the nearest Thousands place. 3 minutes	Answer: (a) 63,000 (b) 870 (c) 21,000

Theme: Everyday Arithmetic (M-07-035) **CODE: A61**	Theme: Everyday Arithmetic (M-07-035) **CODE: A61**
Lesson Title: Story problems with whole numbers and decimals	Lesson Title: Story problems with whole numbers and decimals
a) A trader has 500 mangoes. After selling some mangoes, the number reduced to 289. How many mangoes were sold? b) After recovering from illness, Mustapha tried to gain weight. For 7 weeks he was able to gain 0.4 kg. each week. How much did he gain in total? Round your answer to the nearest kilogram. 4 minutes	Answer: a) 500−289 = 211 mangoes; b) 7×0.4 kg.= 2.8 kg.⟶ 3 kg.
Theme: Numbers and Numeration (M-07-036) **CODE: A62**	Theme: Numbers and Numeration (M-07-036) **CODE: A62**
Lesson Title: Percentages	Lesson Title: Percentages
What do we mean by '**percent**'? 1½ minutes	Answer: **Percent** means per hundred, or part of 100, or out of 100.
Theme: Numbers and Numeration (M-07-036) **CODE: A63**	Theme: Numbers and Numeration (M-07-036) **CODE: A63**
Lesson Title: Percentages	Lesson Title: Percentages
i. A student scored 85 marks out of 100 on an exam. Express this as a percentage. ii. There were 100 women in a meeting, but 25 of them left. What percentage of the women left the meeting? iii. There are 100 pupils registered in a school, and 56 of them are girls. What percentage of the pupils are girls? What percentage are boys? 4 minutes	Answer: i. 85 out of 100 = 85% ii. 25 out of 100 = 25% iii. Girls: 56 out of 100 = 56% Boys: 100−56 = 44 ⟶ 44 out of 100 = 44%
Theme: Numbers and Numeration (M-07-037) **CODE: A64**	Theme: Numbers and Numeration (M-07-037) **CODE: A64**
Lesson Title: Percentages as fractions and decimals	Lesson Title: Percentages as fractions and decimals
Three friends divided a pawpaw. Michael ate 30%, Zainab ate 25%, and Juliette ate 45%. i. Write each percentage as a fraction and simplify the fraction. Write the fraction as a decimal. ii. Add all three fractions together, and add all three decimals together. 4 minutes	Answer: i. $30\% = \frac{30}{100} = \frac{3}{10} = 0.30 = 0.3$ $25\% = \frac{25}{100} = \frac{1}{4} = 0.25$ $45\% = \frac{45}{100} = \frac{9}{20} = 0.45$ ii. $\frac{3}{10} + \frac{1}{4} + \frac{9}{20} = \frac{6+5+9}{20} = \frac{20}{20} = 1$ $0.3 + 0.25 + 0.45 = 1.0$

Theme: Numbers and Numeration (M-07-038) **CODE: A65**	Theme: Numbers and Numeration (M-07-038) **CODE: A65**
Lesson Title: Fractions and decimals to percentages	Lesson Title: Fractions and decimals to percentages
Express the following as a percentage: i) 0.65 ii) $\frac{4}{5}$ iii) 0.2 3½ minutes	Answer: i) 0.65 = 0.65×100% = 65% ii) $\frac{4}{5} = \frac{4x100}{5} = \frac{400}{5}$ = 80% iii) 0.2 x 100% = 20%
Theme: Numbers and Numeration (M-07-039) **CODE: A66**	Theme: Numbers and Numeration (M-07-039) **CODE: A66**
Lesson Title: Identify the percentage of a given quantity	Lesson Title: Identify the percentage of a given quantity
i. Calculate 22% of Le 60,000. ii. Alpha was given 42% of Le 150, 000. Calculate the amount given to Alpha. 3 minutes	Answer: i. 22% of Le 60,000 $= \frac{22}{100} \times \frac{60,000}{1} =$ Le 13,200 ii. 42% of Le 150,000 $= \frac{42}{100} \times \frac{150,000}{1} =$ Le 63,000
Theme: Numbers and Numeration (M-07-040) **CODE: A67**	Theme: Numbers and Numeration (M-07-040) **CODE: A67**
Lesson Title: Express one quantity as a percentage of another	Lesson Title: Express one quantity as a percentage of another
a) In a mathematics lesson, 5 pupils are absent from a class of 25 pupils. What percentage of the class is absent? b) 7 out of every 10 people have watched a football match at the National Stadium. What is this as a percentage? 3 minutes	Answer: $a. \frac{5}{25} \times \frac{100}{1} = \frac{500}{25} = 20\%$ $b. \frac{7}{10} \times \frac{100}{1} = \frac{700}{10} = 70\%$
Theme: Numbers and Numeration (M-07-041) **CODE: A68**	Theme: Numbers and Numeration (M-07-041) **CODE: A68**
Lesson Title: Percentage increase	Lesson Title: Percentage increase
What do we mean by '**increase**'? 1 minute	Answer: **Increase** means addition to a quantity.

Theme: Numbers and Numeration (M-07-041) **CODE: A69**	Theme: Numbers and Numeration (M-07-041) **CODE: A69**
Lesson Title: Percentage increase	Lesson Title: Percentage increase
(i) A bag of rice cost le 150,000, and was increased to le 210,000. Calculate the percentage increase. (ii) A man sells cassava in the market. One week he sold 200 bags and the next week he sold 240 bags. Calculate the percentage increase. 3 minutes	Answer: (i) $\frac{60,000}{150,000} \times \frac{100\%}{1}$ = 40% (ii) $\frac{40}{200} \times \frac{100\%}{1} = 20\%$
Theme: Numbers and Numeration (M-07-042) **CODE: A70**	Theme: Numbers and Numeration (M-07-042) **CODE: A70**
Lesson Title: Percentage decrease	Lesson Title: Percentage decrease
What is the formula for finding the percentage increase or decrease? 1½ minutes	Answer: $\frac{\text{change in quantity}}{\text{original quantity}} \times 100\%$
Theme: Numbers and Numeration (M-07-042) **CODE: A71**	Theme: Numbers and Numeration (M-07-042) **CODE: A71**
Lesson Title: Percentage decrease	Lesson Title: Percentage decrease
i. A businesswoman sells her lappa for le 20,000 per yard, but she sold one yard to her friend for le 15,000. Calculate the percentage decrease. ii. In one year, the number of people who own cell phones in one village increased from 40 people to 60 people. Calculate the percentage increase. 3 minutes	Answer: i. $\frac{5,000}{20,000} \times \frac{100\%}{1} = 25\%$; ii. $\frac{20}{40} \times \frac{100\%}{1} = 50\%$
Theme: Numbers and Numeration (M-07-042) **CODE: A72**	Theme: Numbers and Numeration (M-07-042) **CODE: A72**
Lesson Title: Percentage decrease	Lesson Title: Percentage decrease
(i) There were 800 people living in a village in 2005. By 2015, the population had grown by 20%. What was the population in 2015? (ii) David had 400 DVDs for sale in his shop, but he sold 30% of them. How many DVDs remain in his shop? 4 minutes	Answer: (i) $100 + 20 = 120\ \frac{120}{100} \times \frac{800}{1} = 960$ (ii) $100 - 30 = 70\ \frac{70}{100} \times \frac{400}{1} = 280$ DVDs

Theme: Numbers and Numeration (M-07-044) **CODE: A73**	Theme: Numbers and Numeration (M-07-044) **CODE: A73**
Lesson Title: Applying percentages to problems with money	Lesson Title: Applying percentages to problems with money
i. Francis opened a new cookery shop. On the first day, his profit was Le150, 000. The second day, his profit was 25% lower. What was his profit the second day? ii. Juliet sells lappa in the market. Before, she sold it for le15, 000 per yard. However, the cost of her rent increased and she wants to increase the price of her lappa by 15%. What will be the new price per yard? 4 minutes	Answer: i. $100 - 25 = 75\frac{75}{100} \times \frac{150,000}{1}$ = Le112,500 ii. $100 + 15 = 115\frac{115}{100} \times \frac{15,000}{1}$ = Le17,250
Theme: Numbers and Numeration (M-07-045) **CODE: A74**	Theme: Numbers and Numeration (M-07-045) **CODE: A74**
Lesson Title: Story problems with percentages	Lesson Title: Story problems with percentages
a. Abass gets 80% correct in a test of 20 questions. Calculate the number of questions in the test he got wrong. b. A man bought a car for Le8,000,000 and sold it a year later at Le6,000,000. What was the percentage decrease in the value of the car? 4 minutes	Answer: a. If Abass got 80% correct, then he got 20% wrong (100%−80% = 20%). The number of questions he got wrong is $\frac{20}{100} \times \frac{20}{1} = \frac{400}{100}$ = 4 questions. b. Calculate the amount of the decrease: $8,000,000 - 6,000,000$ = Le2,000,000. Divide the amount decrease by the original quantity and multiply by 100: $\frac{2,000,000}{8,000,000} \times \frac{100}{1} = \frac{200}{8}$ = 25%.