

Theme: Numbers and Numeration (M-07-046) CODE: B 1	Theme: Numbers and Numeration (M-07-046) CODE: B 2
Lesson Title: Introduction to ratio	Lesson Title: Introduction to ratio
<p>What does the term 'ratio' mean?</p> <p style="text-align: right;">1½ minutes</p>	<p>Amadu has 5 pencils and 3 markers. Write down:</p> <p>i. The ratio of pencils to markers in three forms.</p> <p>ii. The ratio of markers to pencils in three forms.</p> <p style="text-align: right;">4 minutes</p>
Theme: Numbers and Numeration (M-07-047) CODE: B 3	Theme: Numbers and Numeration (M-07-048) CODE: B 4
Lesson Title: Ratio of the Whole	Lesson Title: Ratios and Fraction
<p>A farmer has 50 animals on his farm. These include 15 chickens, 17 goats, 10 cows and the rest are sheep. Write:</p> <p>i. The ratio of sheep to cows to goats to chickens</p> <p>ii. The ratio of goats to sheep to cows to chickens</p> <p>iii. The ratio of chickens to all animals</p> <p>iv. The ratio of sheep to all animals</p> <p style="text-align: right;">4 minutes</p>	<p>a. A class has 35 pupils of which there are 15 boys and 20 girls. Write the ratio of boys to girls as fraction in its lowest term.</p> <p>b. Mr. Bundu has 48 animals on his farm. 18 are goats and the rest are cows. Write the ratio of goats to cows as a fraction in its simplest form.</p> <p style="text-align: right;">3 minutes</p>
Theme: Numbers and Numeration (M-07-049) CODE: B 5	Theme: Numbers and Numeration (M-07-049) CODE: B 6
Lesson Title: Ratio and percent	Lesson Title: Ratio and percent
<p>What does the term 'percent' mean?</p> <p style="text-align: right;">1½ minutes</p>	<p>a. Express these percent as ratios:</p> <p>i. 35%</p> <p>ii. 90%</p> <p>iii. 50%</p> <p>b. Express these ratios as percent:</p> <p>i. 3:25</p> <p>ii. 9:20</p> <p style="text-align: right;">4 minutes</p>
Theme: Numbers and Numeration (M-07-050) CODE: B 7	Theme: Numbers and Numeration (M-07-051) CODE: B 8
Lesson Title: Ratio and decimal	Lesson Title: Simplification of ratios
<p>a. Express 400 cm: 1000 cm. as a fraction, decimal, and percentage.</p> <p>b. Express 45 minutes: 180 minutes as a fraction, decimal, and percentage.</p> <p style="text-align: right;">3 minutes</p>	<p>What do we multiply by 4 to get 8?</p> <p style="text-align: right;">2 minutes</p>

Theme: Numbers and Numeration (M-07-051) CODE: B 9	Theme: Numbers and Numeration (M-07-052) CODE: B 10
Lesson Title: Simplification of ratios	Lesson Title: Ratio problems with two terms
<p>a. Reduce 60:180 to its lowest terms.</p> <p>b. Find the missing number: $13:15 = 26:\square$</p> <p>c. Find the missing number: $\square:12 = 3:4$</p> <p style="text-align: right;">3 minutes</p>	<p>Share 120 sweets between Sia and Mariama in the ratio 7:5</p> <p style="text-align: right;">2 minutes</p>
Theme: Numbers and Numeration (M-07-052) CODE: B 11	Theme: Numbers and Numeration (M-07-053) CODE: B 12
Lesson Title: Ratio problems with two terms	Lesson Title: Ratio problems with three or more terms
<p>a. Share 64 bananas between Christiana and Princess in the ratio 5:3</p> <p>b. Divide Le250,000 between John and Thomas in the ratio 2:8</p> <p style="text-align: right;">4 minutes</p>	<p>3 sisters divided 30 pineapples between them in the ratio 3:1:2.</p> <p>Find the total ratio</p> <p style="text-align: right;">2 minutes</p>
Theme: Numbers and Numeration (M-07-053) CODE: B 13	Theme: Numbers and Numeration (M-07-054) CODE: B 14
Lesson Title: Ratio problems with three or more terms	Lesson Title: Relating ratios to measurement
<p>Share Le 60,000 among four girls: Isata, M'balu, Fatu and Hawa in the ratio 4:1:2:5.</p> <p>How much is each girls' share?</p> <p style="text-align: right;">4 minutes</p>	<p>Explain what the total ratio means in sharing a given quantity in a given ratio.</p> <p style="text-align: right;">2 minutes</p>
Theme: Numbers and Numeration (M-07-054) CODE: B 15	Theme: Numbers and Numeration (M-07-055) CODE: B 16
Lesson Title: Relating ratios to measurement	Lesson Title: Ratio story problems
<p>a. Mr. Leigh's study table is in the shape of a rectangle of width 80cm and length 100cm. Calculate the ratio of the width to the length in its simplest form.</p> <p>b. Divide a line of 20 cm in the ratio 3:2:5</p> <p style="text-align: right;">3½ minutes</p>	<p>The ages of three girls Mabel, Alice and Finda are 12, 15 and 11 respectively. Mr. Kamara wants to share 76 exercise books among them in the ratio of their ages.</p> <p>Find how many exercise books each girl will get.</p> <p style="text-align: right;">4 minutes</p>

Theme: Numbers and Numeration (M-07-056) CODE: B 17	Theme: Numbers and Numeration (M-07-056) CODE: B 18
Lesson Title: Introduction to integers	Lesson Title: Introduction to integers
<p>Complete the following sentence:</p> <p>All numbers greater than zero are _____,</p> <p>and all numbers less than zero are _____</p> <p style="text-align: right;">2 minutes</p>	<p>Determine whether each number is positive or negative:</p> <p>(a) +7 (b) -12 (c) -6 (d) 14 (e) 0</p> <p style="text-align: right;">2 minutes</p>
Theme: Numbers and Numeration (M-07-057) CODE: B 19	Theme: Numbers and Numeration (M-07-057) CODE: B 20
Lesson Title: Positive and negative integers	Lesson Title: Positive and negative integers
<p>In which direction do we find positive integers from zero?</p> <p style="text-align: right;">1½ minutes</p>	<p>In which direction do we find the negative integers from zero?</p> <p style="text-align: right;">1½ minutes</p>
Theme: Numbers and Numeration (M-07-057) CODE: B 21	Theme: Numbers and Numeration (M-07-057) CODE: B 22
Lesson Title: Positive and negative integers	Lesson Title: Positive and negative integers
<p>Is zero a positive or a negative integer?</p> <p style="text-align: right;">1½ minutes</p>	<p>a. Write down the symbol for 'greater than'.</p> <p>b. Write down the symbol for 'less than'.</p> <p style="text-align: right;">1½ minutes</p>
Theme: Numbers and Numeration (M-07-057) CODE: B 23	Theme: Numbers and Numeration (M-07-057) CODE: B 24
Lesson Title: Positive and negative integers	Lesson Title: Positive and negative integers
<p>Complete the following sentence:</p> <p>Numbers to the right on a number line are bigger than numbers to the _____.</p> <p style="text-align: right;">1½ minutes</p>	<p>Explain why -10 is less than +10, even though both numbers are the same distance from 0.</p> <p style="text-align: right;">2 minutes</p>

Theme: Numbers and Numeration (M-07-057) CODE: B 25	Theme: Numbers and Numeration (M-07-059) CODE: B 26
Lesson Title: Positive and negative integers	Lesson Title: Addition of integers using a number line
<p>a. List these integers in order from greatest to least: -9, 8, 15, -8, -1, 9</p> <p>b. Use $<$ or $>$ to compare each pair of integers: (i) -30 and 8 (ii) -3 and -12</p> <p style="text-align: right;">3 minutes</p>	<p>Draw a number line and solve:</p> <p>(a) $-1-7$ (b) $4+6$ (c) $-3+9$</p> <p style="text-align: right;">4 minutes</p>
Theme: Numbers and Numeration (M-07-060) CODE: B 27	Theme: Numbers and Numeration (M-07-060) CODE: B 28
Lesson Title: Addition of integers	Lesson Title: Addition of integers
<p>What is 7 plus 4?</p> <p style="text-align: right;">1½ minutes</p>	<p>Complete the following:</p> <p>(a.) $(-) + (-) = \square$ (b.) $(+) + (+) = \square$ (c.) $(+) + (-) = \square$</p> <p style="text-align: right;">2½ minutes</p>
Theme: Numbers and Numeration (M-07-060) CODE: B 29	Theme: Numbers and Numeration (M-07-061) CODE: B 30
Lesson Title: Addition of integers	Lesson Title: Subtraction of integers
<p>Complete the following:</p> <p>(a) $(-5) + (-12)$ (b) $(+17) + (-24)$ (c) $(-31) + (+15)$</p> <p style="text-align: right;">4 minutes</p>	<p>Solve the following:</p> <p>(a) $-3 - (-3) =$ (b) $+3 - (+3) =$ (c) $+3 - (-3) =$</p> <p style="text-align: right;">2 minutes</p>
Theme: Numbers and Numeration (M-07-061) CODE: B 31	Theme: Numbers and Numeration (M-07-062) CODE: B 32
Lesson Title: Subtraction of integers	Lesson Title: Multiplication of numbers using number line
<p>Simplify the following:</p> <p>(a) $-6 - (-9)$ (b) $8 - (+12)$ (c) $3 - (-8)$</p> <p style="text-align: right;">4 minutes</p>	<p>Complete the following:</p> <p>(a) $-x - = \square$ (b) $+x - = \square$ (c) $+x + = \square$</p> <p style="text-align: right;">2 minutes</p>



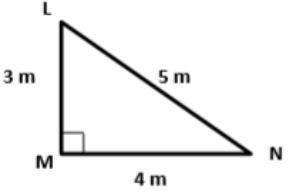
Theme: Numbers and Numeration (M-07-062) CODE: B 33	Theme: Numbers and Numeration (M-07-063) CODE: B 34
Lesson Title: Multiplication of numbers using number line	Lesson Title: Multiplication of integers
<p>Solve the following:</p> <p>(a) 2×3 (b) $2 \times (-3)$ (c) $(-2) \times (-3)$</p> <p style="text-align: right;">2½ minutes</p>	<p>Complete the following:</p> <p>positive x positive = _____ negative x negative = _____ positive x negative = _____ negative x positive = _____</p> <p style="text-align: right;">2½ minutes</p>
Theme: Numbers and Numeration (M-07-063) CODE: B 35	Theme: Everyday Arithmetic (M-07-064) CODE: B 36
Lesson Title: Multiplication of integers	Lesson Title: Division of integers
<p>Simplify the following:</p> <p>(a) $(-4) \times (+3)$ (b) $(-100) \times (-3)$ (c) $(+92) \times (-3)$</p> <p style="text-align: right;">2½ minutes</p>	<p>Complete the following:</p> <p>a. positive \div positive = _____ b. negative \div negative = _____</p> <p style="text-align: right;">1½ minutes</p>
Theme: Everyday Arithmetic (M-07-064) CODE: B 37	Theme: Everyday Arithmetic (M-07-065) CODE: B 38
Lesson Title: Division of integers	Lesson Title: Story problems on integers
<p>Simplify the following:</p> <p>a) $(+28) \div (+4)$ b) $(-49) \div 7$ c) $(-1500) \div (-10)$ d) $(+550) \div (-11)$</p> <p style="text-align: right;">4 minutes</p>	<p>What should we do in this problem?</p> <p>James has 28 mangos. If Mary has 10 mangos more than James, how many mangoes does Mary have?</p> <p style="text-align: right;">2 minutes</p>
Theme: Everyday Arithmetic (M-07-065) CODE: B 39	Theme: Everyday Arithmetic (M-07-065) CODE: B 40
Lesson Title: Story problems on integers	Lesson Title: Story problems on integers
<p>What should we do in this problem?</p> <p>Tommy has 20 coins. If his brother has 4 fewer coins, how many coins does the brother have?</p> <p style="text-align: right;">2 minutes</p>	<p>a. A bird is flying 8m. above the sea and a fish is directly below the bird. If the fish is -12m. under the sea, what is the distance between the bird and fish?</p> <p>b. The air temperature is 28°C and a box of frozen fish is -3°C. What is the difference in temperature between the air and the frozen fish?</p> <p style="text-align: right;">4 minutes</p>

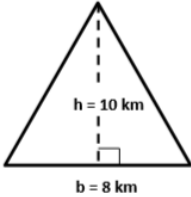
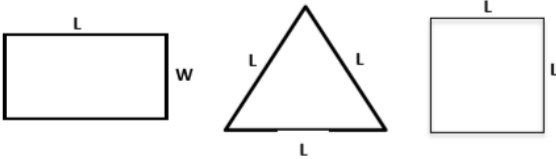
Theme: Everyday Arithmetic (M-07-066) CODE: B 41	Theme: Everyday Arithmetic (M-07-066) CODE: B 42
Lesson Title: Simple proportion	Lesson Title: Simple proportion
<p>What do you understand by the term 'proportion'.</p> <p style="text-align: right;">1½ minutes</p>	<p>What type of fractions are these:</p> $\frac{1}{2} = \frac{5}{10}$ <p style="text-align: right;">1½ minutes</p>
Theme: Everyday Arithmetic (M-07-066) CODE: B 43	Theme: Everyday Arithmetic (M-07-067) CODE: B 44
Lesson Title: Simple proportion	Lesson Title: Simple interest
<p>Jane ran 9 meters in 5 seconds.</p> <p>a. How long will she take to run 27 meters?</p> <p>b. How many meters will she cover in 10 seconds?</p> <p style="text-align: right;">4 minutes</p>	<p>a. Express 5% as a fraction in its lowest term.</p> <p>b. What is 2% of 500?</p> <p style="text-align: right;">2 minutes</p>
Theme: Everyday Arithmetic (M-07-067) CODE: B 45	Theme: Everyday Arithmetic (M-07-067) CODE: B 46
Lesson Title: Simple interest	Lesson Title: Simple interest
<p>What do you understand by the term 'principal'?</p> <p style="text-align: right;">1½ minutes</p>	<p>Write down the symbols of the following words:</p> <p>a. Simple Interest</p> <p>b. Principal</p> <p>c. Rate</p> <p>d. Time (in years)</p> <p>e. Discount</p> <p>f. Commission</p> <p style="text-align: right;">2 minutes</p>
Theme: Everyday Arithmetic (M-07-067) CODE: B 47	Theme: Everyday Arithmetic (M-07-067) CODE: B 48
Lesson Title: Simple interest	Lesson Title: Simple interest
<p>What formula do we use to calculate the simple interest.</p> <p style="text-align: right;">1½ minutes</p>	<p>a. What is the interest paid on Le2500 borrowed for 3 years at a rate of 5% per annum?</p> <p>b. Mary invested Le22,500 for 4 years at a rate of 7% per annum. What interest did she earn?</p> <p style="text-align: right;">4 minutes</p>

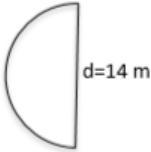

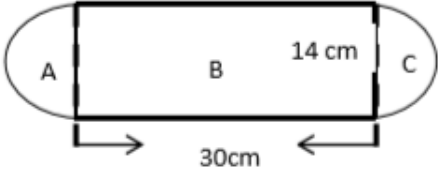
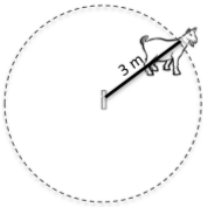
Theme: Everyday Arithmetic (M-07-068) CODE: B 49	Theme: Everyday Arithmetic (M-07-068) CODE: B 50
Lesson Title: Discount	Lesson Title: Discount
<p>What formula do we use to calculate discount?</p> <p style="text-align: right;">1½ minutes</p>	<p>a. Find the sale price for an item that has a price tag of Le100 and a discount rate of 25%.</p> <p>b. A baker has a coupon that reads, 'Get $\frac{1}{3}$ off Le900 bread.' What is the discount? What is the sale price of the bread?</p> <p style="text-align: right;">3½ minutes</p>
Theme: Everyday Arithmetic (M-07-069) CODE: B 51	Theme: Everyday Arithmetic (M-07-069) CODE: B 52
Lesson Title: Commission	Lesson Title: Commission
<p>What do you understand by the term 'commission'?</p> <p style="text-align: right;">1½ minutes</p>	<p>What formula do we use to calculate commission?</p> <p style="text-align: right;">1½ minutes</p>
Theme: Everyday Arithmetic (M-07-069) CODE: B 53	Theme: Everyday Arithmetic (M-07-070) CODE: B 54
Lesson Title: Commission	Lesson Title: Tax
<p>Abass works as a salesperson in a jewellery shop. He is paid on 5% commission on his sales.</p> <p>One very busy day he made the following four sales: a ladies' watch for Le200,000, a diamond necklace for Le500,000, a pair of cufflinks for Le120,000 and a gold bracelet for Le300,000.</p> <p>What was Abass' commission on his total sales?</p> <p style="text-align: right;">3½ minutes</p>	<p>Define the term 'taxes'.</p> <p style="text-align: right;">1½ minutes</p>
Theme: Everyday Arithmetic (M-07-070) CODE: B 55	Theme: Everyday Arithmetic (M-07-070) CODE: B 56
Lesson Title: Tax	Lesson Title: Tax
<p>What formula do we use to calculate sales tax?</p> <p style="text-align: right;">1½ minutes</p>	<p>a. Joe is buying shoes at a boutique, where the sales tax is 3%. The shoes cost Le30, 000. How much is the tax?</p> <p>b. Moses buys a house for Le4, 000,000 and pays a tax of 6%. What is the total cost of the house?</p> <p style="text-align: right;">3½ minutes</p>


Theme: Measurement and Estimation (M-07-071) CODE: B 57	Theme: Measurement and Estimation (M-07-071) CODE: B 58
Lesson Title: Units of measurements	Lesson Title: Units of measurements
When might we need to measure volume ?	When might we need to measure mass , or weight ?
1½ minutes	1½ minutes
Theme: Measurement and Estimation (M-07-071) CODE: B 59	Theme: Measurement and Estimation (M-07-071) CODE: B 60
Lesson Title: Units of measurements	Lesson Title: Units of measurements
Think of an example of a unit used to measure length.	What is mass ?
1 minute	1½ minutes
Theme: Measurement and Estimation (M-07-071) CODE: B 61	Theme: Measurement and Estimation (M-07-071) CODE: B 62
Lesson Title: Units of measurements	Lesson Title: Units of measurements
What is volume ?	(i) List 3 items whose length can be measured. (ii) List 3 items whose mass can be measured. (iii) List 3 items whose volume can be measured.
1½ minutes	3 minutes
Theme: Measurement and Estimation (M-07-072) CODE: B 63	Theme: Measurement and Estimation (M-07-071) CODE: B 64
Lesson Title: Conversion of length	Lesson Title: Units of measurements
a. Which is longer: 1 metre or 1 kilometre? b. Which is longer: 1 centimetre or 1 metre?	(i) Name 2 units for measuring lengths (ii) Name 2 units for measuring mass (iii) Name 2 units for measuring volume
1½ minutes	2 minutes

Theme: Measurement and Estimation (M-07-072) CODE: B 65	Theme: Measurement and Estimation (M-07-073) CODE: B 66
Lesson Title: Conversion of length	Lesson Title: Conversion of mass
<p>a. Change 8243 mm to metres. Round your answer to one decimal place.</p> <p>b. Add 703cm, 956cm and 168cm. Then, express your answer in metres.</p> <p style="text-align: right;">3½ minutes</p>	<p>a. How many millimetres in 1 centimetre?</p> <p>b. What is 1km in metres?</p> <p>c. How many centimetres in a metre?</p> <p style="text-align: right;">2 minutes</p>
Theme: Measurement and Estimation (M-07-073) CODE: B 67	Theme: Measurement and Estimation (M-07-073) CODE: B 68
Lesson Title: Conversion of mass	Lesson Title: Conversion of mass
<p>a. Which is bigger: 1 gram or 1 kilogram?</p> <p>b. Which is smaller: 1 tonne or 1 milligram?</p> <p style="text-align: right;">1½ minutes</p>	<p>a. Change 6215mg to grams. Round your answer to 2 decimal places.</p> <p>b. Add 574g, 603g, and 128g. Give your answer in kilograms.</p> <p style="text-align: right;">3 minutes</p>
Theme: Measurement and Estimation (M-07-074) CODE: B 69	Theme: Measurement and Estimation (M-07-074) CODE: B 70
Lesson Title: Conversion of volume	Lesson Title: Conversion of volume
<p>Which is bigger: 1 litre or 1 millilitre?</p> <p style="text-align: right;">1½ minutes</p>	<p>What are some things we measure with litres?</p> <p style="text-align: right;">1½ minutes</p>
Theme: Measurement and Estimation (M-07-074) CODE: B 71	Theme: Measurement and Estimation (M-07-075) CODE: B 72
Lesson Title: Conversion of volume	Lesson Title: Review of plane shapes
<p>a. Change 419 decilitres to litres.</p> <p>b. Add 34ml, 1,240ml, and 829ml.</p> <p>Give your answer in litres. Round to the nearest litre.</p> <p style="text-align: right;">3 minutes</p>	<p>1. Why are squares and rectangle called quadrilaterals?</p> <p>2. How many sides does a triangle have?</p> <p>3. Name 4 types of triangles.</p> <p style="text-align: right;">3½ minutes</p>

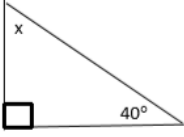
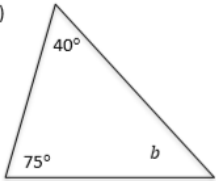
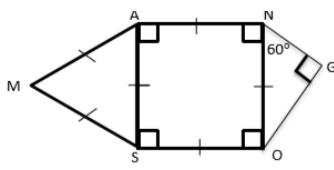
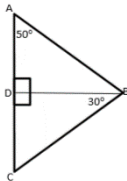
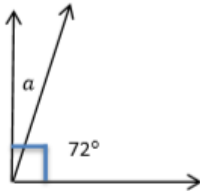
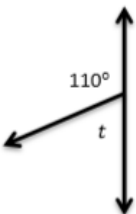
Theme: Measurement and Estimation (M-07-075) CODE: B 73	Theme: Measurement and Estimation (M-07-075) CODE: B 74
Lesson Title: Review of plane shapes	Lesson Title: Review of plane shapes
<p>Draw the following shapes:</p> <p>Rectangle EFGH, Square QRST, and Triangle ABC.</p> <p style="text-align: right;">3½ minutes</p>	<p>Draw the following shapes:</p> <p>a scalene triangle ABC, an equilateral triangle DEF, an isosceles triangle RST, and a right-angled triangle XYZ.</p> <p style="text-align: right;">4 minutes</p>
Theme: Measurement and Estimation (M-07-077) CODE: B 75	Theme: Measurement and Estimation (M-07-077) CODE: B 76
Lesson Title: Area of rectangles and squares	Lesson Title: Area of rectangles and squares
<p>What is area?</p> <p style="text-align: right;">1½ minutes</p>	<p>a. What is the longest side of a rectangle called?</p> <p>b. What is the shortest side of a rectangle called?</p> <p style="text-align: right;">1½ minutes</p>
Theme: Measurement and Estimation (M-07-077) CODE: B 77	Theme: Measurement and Estimation (M-07-077) CODE: B 78
Lesson Title: Area of rectangles and squares	Lesson Title: Area of rectangles and squares
<p>a. What is the formula to calculate the area of a square?</p> <p>b. What is the formula to calculate the area of a rectangle?</p> <p style="text-align: right;">2 minutes</p>	<p>Calculate the area of these two shapes:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>4 cm</p>  </div> <div style="text-align: center;"> <p>3 m</p>  <p>8 m</p> </div> </div> <p style="text-align: right;">2½ minutes</p>
Theme: Measurement and Estimation (M-07-078) CODE: B 79	Theme: Measurement and Estimation (M-07-078) CODE: B 80
Lesson Title: Area of triangles	Lesson Title: Area of triangles
<p>Consider the following triangle:</p>  <p>a. What is the base of this triangle?</p> <p>b. What is the height of this triangle?</p> <p style="text-align: right;">2½ minutes</p>	<p>What is the formula to calculate the area of a triangle?</p> <p style="text-align: right;">1½ minutes</p>

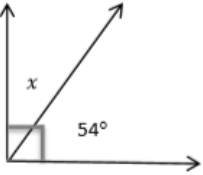
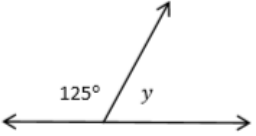
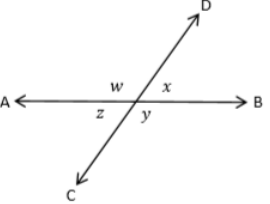
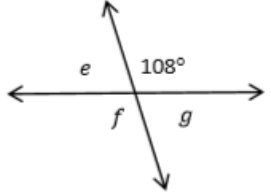
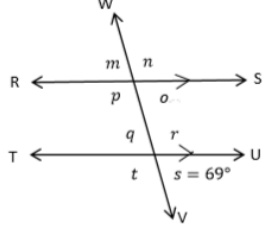
Theme: Measurement and Estimation (M-07-078) CODE: B 81	Theme: Measurement and Estimation (M-07-079) CODE: B 82
Lesson Title: Area of triangles	Lesson Title: Perimeter story problems
<p>Find the area of this shape:</p>  <p style="text-align: right;">2½ minutes</p>	<p>Label the following shapes:</p>  <p style="text-align: right;">2 minutes</p>
Theme: Measurement and Estimation (M-07-079) CODE: B 83	Theme: Measurement and Estimation (M-07-080) CODE: B 84
Lesson Title: Perimeter story problems	Lesson Title: Area story problems
<p>Mr. Bangura wants to build a fence around his house.</p> <p>His yard is 40 metres long and 30 metres wide.</p> <p>How long will the fence be?</p> <p style="text-align: right;">2½ minutes</p>	<p>A Farmer wants to find the area of his farm so that he can buy fertilizer for his crops. His farm is 150 m long and 80 m wide.</p> <p>What is the area of his farm?</p> <p>If one container of fertilizer covers 1000 square meters, how many containers of fertilizer will the farmer need?</p> <p style="text-align: right;">2½ minutes</p>
Theme: Measurement and Estimation (M-07-081) CODE: B 85	Theme: Measurement and Estimation (M-07-081) CODE: B 86
Lesson Title: Circles	Lesson Title: Circles
<p>Explain the meaning of the following terms:</p> <ol style="list-style-type: none"> Centre Circumference Radius Diameter <p style="text-align: right;">3½ minutes</p>	<ol style="list-style-type: none"> Sketch a circle with radius 7 m. What is the diameter? Sketch a circle with diameter 42 m. What is the radius? <p style="text-align: right;">2½ minutes</p>
Theme: Measurement and Estimation (M-07-082) CODE: B 87	Theme: Measurement and Estimation (M-07-083) CODE: B 88
Lesson Title: Circumference of circles	Lesson Title: Area of circles
<ol style="list-style-type: none"> What is the circumference of a circle with radius 21 cm? (Use $\frac{22}{7}$ for the value of π). What is the circumference of a circle with diameter 56 in? (Use $\frac{22}{7}$ for the value of π). <p style="text-align: right;">3½ minutes</p>	<p>What is the formula to calculate the area of a circle?</p> <p style="text-align: right;">1½ minutes</p>

Theme: Measurement and Estimation (M-07-083) CODE: B 89	Theme: Measurement and Estimation (M-07-084) CODE: B 90
Lesson Title: Area of circles	Lesson Title: Problem solving with circles
<p>a. Find the area of a circle of radius 8 cm</p> <p>b. Find the area of a circle of radius 12 cm</p> <p style="text-align: right;">3½ minutes</p>	<p>What is circumference?</p> <p style="text-align: right;">1½ minutes</p>
Theme: Measurement and Estimation (M-07-084) CODE: B 91	Theme: Measurement and Estimation (M-07-084) CODE: B 92
Lesson Title: Problem solving with circles	Lesson Title: Problem solving with circles
<p>What is a semi-circle?</p> <p style="text-align: right;">1½ minutes</p>	<p>Consider the following figure:</p>  <p>What is the radius of this semi-circle?</p> <p style="text-align: right;">1½ minutes</p>
Theme: Measurement and Estimation (M-07-084) CODE: B 93	Theme: Measurement and Estimation (M-07-084) CODE: B 94
Lesson Title: Problem solving with circles	Lesson Title: Problem solving with circles
<p>Solve:</p> <p>A semi-circle has a diameter of 28cm. What is the area? (use $\pi = \frac{22}{7}$)</p>  <p style="text-align: right;">3 minutes</p>	<p>Calculate the area of the shape below (use $\pi = \frac{22}{7}$).</p>  <p style="text-align: right;">4½ minutes</p>
Theme: Measurement and Estimation (M-07-085) CODE: B 95	Theme: Measurement and Estimation (M-07-086) CODE: B 96
Lesson Title: Circle story problems	Lesson Title: Volume of solids
<p>a. A goat is tied to a peg in the ground. The rope is 3 m. long. What area of grass can the goat eat? (Use $\pi = 3.14$)</p> <p>b. A circular mat has a radius of 2 m. Calculate the area of the mat. (Use $\pi = 3.14$)</p>  <p style="text-align: right;">4 minutes</p>	<p>a. Find the area of a rectangle with length 7 cm and width 5 cm</p> <p>b. What does a square unit measure?</p> <p style="text-align: right;">2½ minutes</p>

Theme: Measurement and Estimation (M-07-086) CODE: B 97	Theme: Measurement and Estimation (M-07-087) CODE: B 98
Lesson Title: Volume of solids	Lesson Title: Volume of a cube
<p>a. Draw a rectangular prism with height 5m length 3m and width 2m</p> <p>b. What units will the volume be in?</p> <p style="text-align: right;">3 minutes</p>	<p>a. State the formula of the volume of a rectangular solid.</p> <p>b. If the unit is feet, what will the unit for volume be?</p> <p style="text-align: right;">2 minutes</p>
Theme: Measurement and Estimation (M-07-087) CODE: B 99	Theme: Measurement and Estimation (M-07-087) CODE: B 100
Lesson Title: Volume of a cube	Lesson Title: Volume of a cube
<p>Draw a cube of sides 5 cm and calculate its volume.</p> <p style="text-align: right;">3½ minutes</p>	<p>Fill in the blank spaces to show volume of a cube with sides of length 15 feet: $V = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ft}^3$</p> <p style="text-align: right;">2½ minutes</p>
Theme: Measurement and Estimation (M-07-088) CODE: B 101	Theme: Measurement and Estimation (M-07-088) CODE: B 102
Lesson Title: Volume of a cuboids	Lesson Title: Volume of a cuboids
<p>State the formula for the volume of a cuboid.</p> <p style="text-align: right;">1½ minutes</p>	<p>a. Calculate the volume of the cuboid below:</p>  <p>b. A cuboid measures 4mm by 3mm by 6mm. Find the volume of the cuboid.</p> <p style="text-align: right;">3 minutes</p>
Theme: Measurement and Estimation (M-07-089) CODE: B 103	Theme: Measurement and Estimation (M-07-089) CODE: B 104
Lesson Title: Problem solving with volumes	Lesson Title: Problem solving with volumes
<p>a. State the formula for finding the volume of cuboid.</p> <p>b. State the formula for finding the volume of a cube.</p> <p style="text-align: right;">1½ minutes</p>	<p>a. A box has a base with area 81 cm². Calculate the volume of the box if it is 10 cm deep.</p> <p>b. A wooden cupboard is 10cm high. The volume of wood used to make the cupboard is 1000 cm³. Calculate the area of the base of the wooden cupboard.</p> <p style="text-align: right;">3½ minutes</p>

Theme: Measurement and Estimation (M-07-090) CODE: B 105	Theme: Measurement and Estimation (M-07-090) CODE: B 106
Lesson Title: Volume story problems	Lesson Title: Volume story problems
<p>a. What is 1 cubic unit?</p> <p>b. What is volume?</p> <p style="text-align: right;">2 minutes</p>	<p>A water tank is 12m high, 5m long and 9m wide. A solid metal box 7m high, 4m long and 8m wide is sitting at the bottom of the tank. The tank is filled with water.</p> <p>What is the shape of the water tank and solid metal?</p> <p style="text-align: right;">1 minute</p>
Theme: Measurement and Estimation (M-07-090) CODE: B 107	Theme: Geometry (M-07-091) CODE: B 108
Lesson Title: Volume story problems	Lesson Title: Introduction to angles
<p>A sea turtle house at the zoo is made by connecting two large glass tanks.</p> <p>The first glass tank is 6 m long, 4 m wide and 2 m high. The second glass tank is 8 m long, 9 m wide and 3 m high.</p> <p>How many cubic meters of space do the sea turtles have in their house?</p> <p style="text-align: right;">4 minutes</p>	<p>What is an angle?</p> <p style="text-align: right;">1½ minutes</p>
Theme: Geometry (M-07-091) CODE: B 109	Theme: Geometry (M-07-092) CODE: B 110
Lesson Title: Introduction to angles	Lesson Title: Right angles
<p>A. Draw 3 angles: 1 obtuse, 1 right, and 1 acute angle.</p> <p>B. Classify the following degrees into obtuse, right or acute angle: i.1° ii.91° iii. 89° iv.90° v.179°</p> <p style="text-align: right;">4 minutes</p>	<p>What are the units we use to measure angles?</p> <p style="text-align: right;">1 minute</p>
Theme: Geometry (M-07-092) CODE: B 111	Theme: Geometry (M-07-093) CODE: B 112
Lesson Title: Right angles	Lesson Title: Measurement of angles
<p>Draw a square. Measure each of its 4 angles. Find the sum of the four angles of the square.</p> <p style="text-align: right;">2½ minutes</p>	<p>Draw an acute angle and an obtuse angle. Estimate the measure of each, then measure them with a protractor.</p> <p style="text-align: right;">4 minutes</p>

Theme: Geometry (M-07-094) CODE: B 113	Theme: Geometry (M-07-095) CODE: B 114
Lesson Title: Finding unknown angles in triangles	Lesson Title: Find unknown angles in composite shapes
<p>Find the unknown angles in the diagrams:</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>a)</p>  </div> <div style="text-align: center;"> <p>b)</p>  </div> </div> <p style="text-align: center;">4 minutes</p>	<p>Find the value or the lettered angles:</p> <div style="text-align: center;">  </div> <p style="text-align: center;">2½ minutes</p>
Theme: Geometry (M-07-095) CODE: B 115	Theme: Geometry (M-07-096) CODE: B 116
Lesson Title: Find unknown angles in composite shapes	Lesson Title: Intr to complementary & supplementary angles
<p>Find the value or the lettered angles:</p> <div style="text-align: center;">  </div> <p style="text-align: center;">2½ minutes</p>	<p>Complete the following sentences:</p> <ol style="list-style-type: none"> Angles that add up to 90 degrees are called _____. Angles that add up to 180 degrees are called _____. <p style="text-align: center;">2 minutes</p>
Theme: Geometry (M-07-096) CODE: B 117	Theme: Geometry (M-07-097) CODE: B 118
Lesson Title: Intro to complementary & supplementary angles	Lesson Title: Complimentary angles
<p>Solve:</p> <ol style="list-style-type: none"> $1^\circ + 89^\circ$ $60^\circ + 120^\circ$ $79^\circ + 11^\circ$ $45^\circ + 45^\circ$ $171^\circ + 9^\circ$ <p style="text-align: center;">3½ minutes</p>	<p>Find the value of a in the diagram below:</p> <div style="text-align: center;">  </div> <p style="text-align: center;">2 minutes</p>
Theme: Geometry (M-07-097) CODE: B 119	Theme: Geometry (M-07-098) CODE: B 120
Lesson Title: Complimentary angles	Lesson Title: Supplementary angles
<ol style="list-style-type: none"> If m and 54° are complementary angles, find the value of angle m. If y and 7° are complementary angles, find the value of angle y. <p style="text-align: center;">2½ minutes</p>	<ol style="list-style-type: none"> If p and 3° are supplementary angles, find the value of angle p. If s and 162° are supplementary angles, find the value of angle s. Find the missing angle t in the diagram: <div style="text-align: center;">  </div> <p style="text-align: center;">3 minutes</p>

Theme: Geometry (M-07-099) CODE: B 121	Theme: Geometry (M-07-099) CODE: B 122
Lesson Title: Supplementary angles	Lesson Title: Supplementary angles
<p>Find the values of the missing angles in the diagrams below:</p> <p>a) </p> <p>b) </p> <p style="text-align: right;">2½ minutes</p>	<p>Consider the diagram below and complete the following:</p> <p>a. $w + x =$ b. $z + y =$ c. $x + y =$ d. $z + w =$</p> <p></p> <p style="text-align: right;">3½ minutes</p>
Theme: Geometry (M-07-099) CODE: B 123	Theme: Geometry (M-07-099) CODE: B 124
Lesson Title: Supplementary angles	Lesson Title: Supplementary angles
<p>Consider the following equation and find the value of x:</p> $x + 56^\circ = 180^\circ$ <p style="text-align: right;">1½ minutes</p>	<p>Find the values of the missing angles in the diagram below:</p> <p></p> <p style="text-align: right;">3½ minutes</p>
Theme: Geometry (M-07-100) CODE: B 125	Theme: Geometry (M-07-100) CODE: B 126
Lesson Title: Transversal of parallel lines	Lesson Title: Transversal of parallel lines
<p>Complete the following sentences:</p> <p>a. Corresponding angles on parallel lines are _____</p> <p>b. Co-interior angles on parallel lines add up to _____</p> <p>c. Alternate angles on parallel lines are _____</p> <p style="text-align: right;">2½ minutes</p>	<p>Find the values of the missing angles:</p> <p></p> <p style="text-align: right;">3½ minutes</p>
Theme: Geometry (M-07-101) CODE: B 127	Theme: Geometry (M-07-102) CODE: B 128
Lesson Title: Transversal of parallel lines	Lesson Title: Construction of triangles
<p>Draw a circle and label the following:</p> <p>a. Centre B</p> <p>b. Diameter CD</p> <p>c. Two radii BE and BF</p> <p style="text-align: right;">3 minutes</p>	<p>Construct triangle ABC such that :</p> $\overline{AB} = 5 \text{ cm}, \overline{BC} = 6 \text{ cm and } \overline{AC} = 7 \text{ cm}$ <p style="text-align: right;">3½ minutes</p>

Theme: Geometry (M-07-103) CODE: B 129	Theme: Geometry (M-07-104) CODE: B 130
Lesson Title: Construction of parallel lines	Lesson Title: Construction of perpendicular lines
<p data-bbox="188 264 443 297">Draw a vertical line \overline{AB}</p> <p data-bbox="188 353 523 387">Parallel to it, construct line \overline{CD}</p> <p data-bbox="576 510 695 544">3½ minutes</p>	<p data-bbox="778 264 1066 297">Draw a line segment \overline{AB}</p> <p data-bbox="778 331 1018 365">Construct a point C on it</p> <p data-bbox="778 387 986 421">Construct line \overline{DE}</p> <p data-bbox="778 443 1018 477">Perpendicular to \overline{AB}</p> <p data-bbox="1257 510 1361 544">4 minutes</p>
Theme: Geometry (M-07-105) CODE: B 131	
Lesson Title: Construction practise	
<p data-bbox="97 732 699 833">Draw a line segment \overline{QR}. Mark a point P on it. Construct line \overline{ST} perpendicular to \overline{QR}.</p> <p data-bbox="576 956 679 990">4 minutes</p>	