

Week	Lesson	Strand	Sub-Strand	Specific Learning Outcomes	Learning Experiences	Key Inquiry Questions	Learning Resources	Assessment Methods	Reflection
1	1	ALGEBRA	Algebraic expressions  Simplifying algebraic expressions involving multiplication and division	By the end of the lesson, the learner should be able to: a) Simplify algebraic expressions using the BODMAS rule. b) Simplify algebraic expressions involving multiplication and division. c) Enjoy simplifying algebraic expressions involving multiplication and division.	Learners are guided in pairs, in groups or individually to: Simplify algebraic expressions using the BODMAS rule. Simplify algebraic expressions involving multiplication and division. Use digital devices to play games.	How can you simplify algebraic expressions involving multiplication and division?	Smart Minds Mathematics Learner's Book Grade 7 pg. 75-77  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	ALGEBRA	Linear equations  Forming linear equations involving addition and subtraction	By the end of the lesson, the learner should be able to: a) Explain how to form linear equations involving addition and subtraction b) Form linear equations involving addition and subtraction. c) Enjoy forming linear equations involving addition and subtraction.	Learners are guided in pairs, in groups or individually to: Explain how to form linear equations involving addition and subtraction Form linear equations involving addition and subtraction. Work out task 1	Which formula do you use to form linear equations involving addition and subtraction?	Smart Minds Mathematics Learner's Book Grade 7 pg. 77-78  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	3	ALGEBRA	Linear equations  Forming linear equations involving multiplication and division	By the end of the lesson, the learner should be able to: a) Explain how to form linear equations involving multiplication and division b) Form linear equations involving multiplication and division. c) Enjoy forming linear equations involving multiplication and division.	Learners are guided in pairs, in groups or individually to: Explain how to form linear equations involving multiplication and division Form linear equations involving multiplication and division. Work out task 2	Which formula do you use to form linear equations involving multiplication and division?	Smart Minds Mathematics Learner's Book Grade 7 pg. 78-79  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

	4	ALGEBR A	Solving linear equations involving addition and subtraction	By the end of the lesson, the learner should be able to: a) Use a digital device to watch a video on solving linear equations involving addition and subtraction. b) Solve linear equations involving addition and subtraction. c) Have fun solving linear equations involving addition and subtraction.	Learners are guided in pairs, in groups or individually to: Use a digital device to watch a video on solving linear equations involving addition and subtraction. Solve linear equations involving addition and subtraction.	What is the unknown in $2x - 6 + x = 12$ ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 79  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	5	ALGEBR A	Solving linear equations involving multiplicatio n and division	By the end of the lesson, the learner should be able to: a) Use a digital device to watch a video on solving linear equations involving multiplication and division. b) Solve linear equations involving multiplication and division. c) Enjoy solving linear equations involving multiplication and division.	Learners are guided in pairs, in groups or individually to: Use a digital device to watch a video on solving linear equations involving multiplication and division. Solve linear equations involving multiplication and division. Play games using digital devices.	What is the unknown in $4(3 - x) = 24$ ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 80- 81  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
2	1	ALGEBR A	Linear inequalities  Inequality symbols	By the end of the lesson, the learner should be able to: a) Identify and write down inequality symbols. b) Use inequality symbols to complete simple linear inequalities. c) Appreciate inequality symbols.	Learners are guided in pairs, in groups or individually to: Identify and write down inequality symbols. Use inequality symbols to complete simple linear inequalities.	How do we use linear equations in real life?	Smart Minds Mathematics Learner's Book Grade 7 pg. 81- 82 Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	ALGEBR A	Linear inequalities	By the end of the lesson, the learner should be able to: a) Explain how to forming simple linear inequalities	Learners are guided in pairs, in groups or individually to:	What is the value of x in the inequality	Smart Minds Mathematics Learner's Book Grade 7 pg. 83	Class activities Written tests Home	

			Forming simple linear inequalities involving addition and subtraction	involving addition and subtraction. b) Form simple linear inequalities involving addition and subtraction. c) Enjoy forming simple linear inequalities involving addition and subtraction	Explain how to forming simple linear inequalities involving addition and subtraction. Use a beam balance to weigh different masses then form simple inequalities Form simple linear inequalities involving addition and subtraction. Perform task 2.	below $3x - 15 > 10$ ?	Information from different sources	Assignments Oral questions Checklists Portfolio Observation	
	3	ALGEBRA	Linear inequalities  Forming simple linear inequalities involving multiplication and division	By the end of the lesson, the learner should be able to: a) Explain how to forming simple linear inequalities involving multiplication and division. b) Form simple linear inequalities involving multiplication and division. c) Enjoy forming simple linear inequalities involving multiplication and division.	Learners are guided in pairs, in groups or individually to: Explain how to forming simple linear inequalities involving multiplication and division. Form simple linear inequalities involving multiplication and division. Perform task 3.	What is the value of x in the inequality below $2x = 32$ ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 84  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	4	ALGEBRA	Linear inequalities  Illustrations of simple inequalities on a number line	By the end of the lesson, the learner should be able to: a) Draw and represent simple inequality statements on a number line. b) Use digital device, watch a video on representing inequalities on a number line. c) Appreciate simple inequalities on a number line.	Learners are guided in pairs, in groups or individually to: Draw and represent simple inequality statements on a number line. Use digital device, watch a video on representing inequalities on a number line. Perform task 4	What is the value of p in the inequality below $p + 8 < 10$ ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 84-86  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	5	ALGEBRA	Linear inequalities	By the end of the lesson, the learner should be able to:	Learners are guided in pairs, in groups or individually to:	What are compound inequalities?	Smart Minds Mathematics	Class activities Written tests	

			Compound inequalities	a) Explain the meaning of compound inequalities. b) Use inequality cards to complete compound inequality statements. c) Have fun solving questions using the appropriate inequality.	Explain the meaning of compound inequalities. Use inequality cards to complete compound inequality statements. Solve each question by forming and solving an appropriate inequality.		Learner's Book Grade 7 pg. 86-87  Information from different sources	Home Assignments Oral questions Checklists Portfolio Observation	
3	1	ALGEBRA	Linear inequalities   Illustration of compound inequalities on a number line	By the end of the lesson, the learner should be able to: a) Use inequality cards to complete compound inequality statements. b) Draw and represent compound inequality statements on a number line. c) Appreciate compound inequalities on a number line.	Learners are guided in pairs, in groups or individually to: Use inequality cards to complete compound inequality statements. Draw and represent compound inequality statements on a number line. Use IT tools to play games involving inequalities.	What is the value of $n$ in the inequality below $n + 6 < 12$ ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 87-88  Information from different sources	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	MEASUREMENTS	Pythagorean relationship   The sides of a right-angled triangle	By the end of the lesson, the learner should be able to: a) Use a digital device, search for the names of the sides of a right-angled triangle. b) Recognize the sides of a right-angled triangle in different situations c) Contemplate working easily using Pythagorean theory.	Learners are guided in pairs, in groups or individually to: Use a digital device, search for the names of the sides of a right-angled triangle. Recognize the sides of a right-angled triangle in different situations. Draw a triangle and name the sides. Work out task 1	What is the hypotenuse in a right-angle triangle whose height is 3 and base 4?	Smart Minds Mathematics Learner's Book Grade 7 pg. 89-90  Ladder Stairs Square cut outs 1cm squares 1m squares	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

	3	MEASUREMENTS	Pythagorean relationship  Pythagorean relationship	By the end of the lesson, the learner should be able to: a) Draw 1 cm squares of a given right-angled triangle to determine the Pythagorean relationship. b) Apply the Pythagorean relationship to work out sides of various right-angled triangles. c) Promote the use of the Pythagoras Theorem in real-life situations.	Learners are guided in pairs, in groups or individually to: Draw 1 cm squares of a given right-angled triangle to determine the Pythagorean relationship. Apply the Pythagorean relationship to real-life situations. Use a digital device, watch a video on the real-life application of the Pythagorean theorem.	What are the areas in life where the Pythagorean theory can be applied?	Smart Minds Mathematics Learner's Book Grade 7 pg. 90-94  Ladder Stairs Square cut outs 1cm squares 1m squares	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
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	4	MEASURE MENT	Length  Converting units of length	By the end of the lesson, the learner should be able to: a) Measure the length of their classroom using a tape measure. b) Generate a conversation table involving units of length. c) Have fun measuring the length of their classroom.	Learners are guided in pairs, in groups or individually to: Measure the length of their classroom using a tape measure. Generate a conversation table involving units of length.	What is length?	Smart Minds Mathematics Learner's Book Grade 7 pg. 94-95  Place value chart Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	5	MEASURE MENT	Length  Operation involving units of length – addition involving length	By the end of the lesson, the learner should be able to: a) Study the map and answer the questions that follow. b) Work out addition involving length. c) Appreciate the use of addition in determining length.	Learners are guided in pairs, in groups or individually to: Study the map and answer the questions that follow. Measure the width of their classroom using a metre rule. Work out addition involving length.	The length of 2 ropes is 98m 62cm and 33m 66dm 12cm. What is the total length of the ropes?	Smart Minds Mathematics Learner's Book Grade 7 pg. 96-97  Place value chart Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

4	1	MEASURE MENT	Length  Operation involving units of length – subtraction involving length	By the end of the lesson, the learner should be able to: a) Measure the length of their classroom using a metre ruler. b) Work out subtraction involving length. c) Appreciate the use of subtraction.	Learners are guided in pairs, in groups or individually to: Make cards and use them for subtraction. Measure the length of their classroom using a metre ruler. Work out subtraction involving length.	What is 4m 6dm 8cm - 2m 4dm 9cm?	Smart Minds Mathematics Learner's Book Grade 7 pg. 98- 99  Place value chart Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	MEASURE MENT	Length  Operation involving units of length – multiplicatio n involving length	By the end of the lesson, the learner should be able to: a) Make or cut 5m 24cm of thread/string. b) Outline the procedure to work out multiplication of length and work out multiplication of length. c) Appreciate the use of multiplication.	Learners are guided in pairs, in groups or individually to: Make or cut 5m 24cm of thread/string and cut it into 4 equal parts. Outline the procedure to work out multiplication of length. Work out multiplication of length.	How do you work out multiplicati on involving length?	Smart Minds Mathematics Learner's Book Grade 7 pg. 99- 100  Place value chart Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	3	MEASURE MENT	Length  Operation involving units of length – division involving length	By the end of the lesson, the learner should be able to: a) Make or cut 5m 24cm of thread/string. b) Outline the procedure to work out division of length and work out division of length. c) Appreciate the use of division.	Learners are guided in pairs, in groups or individually to: Make or cut 5m 24cm of thread/string. Cut the thread/string into 4 equal parts. Outline the procedure to work out division of length. Work out division of length.	How do you work out division?	Smart Minds Mathematics Learner's Book Grade 7 pg. 101- 102  Place value chart Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	4	MEASURE MENT	Perimeter	By the end of the lesson, the learner should be able to: a) Make cutouts of a square, a rectangle and a	Learners are guided in pairs, in groups or individually to: Define a perimeter.	What is perimeter?	Smart Minds Mathematics Learner's Book Grade 7 pg. 101- 103	Class activities Written tests Home Assignments Oral questions	

				<p>triangle from a manilla paper.</p> <p>b) Measure the distance round each shape using a ruler.</p> <p>c) Appreciate the use of perimeters.</p>	<p>Make cutouts of a square, a rectangle and a triangle from a manilla paper.</p> <p>Measure the distance round each shape using a ruler.</p>		<p>Place value chart</p> <p>Ruler</p> <p>Digital devices</p>	<p>Checklists</p> <p>Portfolio</p> <p>Observation</p>	
	<b>5</b>	MEASURE MENT	<p>Perimeter</p> <p>Circumference of circles</p>	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Use a tape measure to measure the distance round circular objects.</p> <p>b) Outline the procedure to work out the perimeter of circles.</p> <p>c) Have fun working out perimeters of various figures.</p>	<p>Learners are guided in pairs, in groups or individually to:</p> <p>Use a tape measure to measure the distance round circular objects.</p> <p>Mention the formula for circumference of a circle.</p> <p>Outline the procedure to work out the perimeter of various figures.</p> <p>Play digital games.</p>	<p>How do you determine the perimeter of a circle with diameter 28m?</p>	<p>Smart Minds Mathematics Learner's Book Grade 7 pg. 103-105</p> <p>Place value chart</p> <p>Ruler</p> <p>Digital devices</p>	<p>Class activities</p> <p>Written tests</p> <p>Home Assignments</p> <p>Oral questions</p> <p>Checklists</p> <p>Portfolio</p> <p>Observation</p>	
<b>5</b>	<b>1</b>	MEASURE MENT	<p>Area</p> <p>Square meters (m<sup>2</sup>), acres and hectares</p>	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Find the area of a square with sides 1m.</p> <p>b) Explain the conversion units of acres and hectares in relation to meter square (m<sup>2</sup>).</p> <p>c) Appreciate area in square meters, acres, hectares.</p>	<p>Learners are guided in pairs, in groups or individually to:</p> <p>Draw various circles using a compass.</p> <p>Use a string/thread and a ruler to measure the length around the circle.</p>	<p>How many square meters are there in 10 acres?</p>	<p>Smart Minds Mathematics Learner's Book Grade 7 pg. 106-108</p> <p>Place value chart</p> <p>Ruler</p> <p>Digital devices</p>	<p>Class activities</p> <p>Written tests</p> <p>Home Assignments</p> <p>Oral questions</p> <p>Checklists</p> <p>Portfolio</p> <p>Observation</p>	
	<b>2</b>	MEASURE MENT	<p>Area</p> <p>Area of Rectangle</p>	<p>By the end of the lesson, the learner should be able to:</p> <p>a) State the formula for calculating the area of a rectangle.</p> <p>b) Work out the area of various rectangles.</p>	<p>Learners are guided in pairs, in groups or individually to:</p> <p>Draw a rectangle.</p> <p>State the formula for calculating the area of a rectangle.</p>	<p>What is the formula for calculating the area of a rectangle?</p>	<p>Smart Minds Mathematics Learner's Book Grade 7 pg. 108-110</p> <p>Ruler</p> <p>Digital devices</p>	<p>Class activities</p> <p>Written tests</p> <p>Home Assignments</p> <p>Oral questions</p> <p>Checklists</p> <p>Portfolio</p> <p>Observation</p>	

				c) Have fun calculating the area of a rectangle.	Work out the area of various rectangles.				
	<b>3</b>	MEASURE MENT	Area  Area of Parallelogram	By the end of the lesson, the learner should be able to: a) State the formula for calculating the area of a parallelogram. b) Work out the area of various parallelogram. c) Enjoy calculating the area a parallelogram.	Learners are guided in pairs, in groups or individually to: Trace or draw a parallelogram on a piece of paper. State the formula for calculating the area of a parallelogram. Work out the area of various parallelogram.	What is the formula for calculating the area of a parallelogram?	Smart Minds Mathematics Learner's Book Grade 7 pg. 110-112  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>4</b>	MEASURE MENT	Area  Area of Rhombus	By the end of the lesson, the learner should be able to: a) State the formula for calculating the area of a rhombus. b) Work out the area of various rhombus. c) Have fun calculating the area a rhombus.	Learners are guided in pairs, in groups or individually to: Trace or draw a rhombus on a piece of paper. State the formula for calculating the area of a rhombus. Work out the area of various rhombus	What is the formula for calculating the area of a rhombus?	Smart Minds Mathematics Learner's Book Grade 7 pg. 112-114  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>5</b>	MEASURE MENT	Area  Area of Trapezium	By the end of the lesson, the learner should be able to: a) State the formula for calculating the area of a trapezium. b) Work out the area of various trapezium. c) Have fun calculating the area a trapezium.	Learners are guided in pairs, in groups or individually to: Trace or draw a trapezium on a piece of paper. State the formula for calculating the area of a trapezium. Work out the area of various trapezium.	What is the formula for calculating the area of a trapezium?	Smart Minds Mathematics Learner's Book Grade 7 pg. 114-116  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
<b>6</b>	<b>1</b>	MEASURE MENT	Area  Area of Circles	By the end of the lesson, the learner should be able to: a) Watch a video from the link in learner's book.	Learners are guided in pairs, in groups or individually to: Watch a video from the link in learner's book.	What do you notice between the width and	Smart Minds Mathematics Learner's Book Grade 7 pg. 116-118	Class activities Written tests Home Assignments Oral questions	



				b) Divide a circle into 16 parts cut out the sectors and paste them on a manilla paper. c) Appreciate the use of digital devices.	Divide a circle into 16 parts cut out the sectors and paste them on a manilla paper. Work out the area of various circles. Work out task 6.	the radius of a circle? What is the formula for calculating the area of a circle?	Ruler Pair of scissors Digital devices	Checklists Portfolio Observation	
	<b>2</b>	MEASURE MENT	Area of borders	By the end of the lesson, the learner should be able to: a) State the formula for calculating the area of borders. b) Work out the area of various borders. c) Enjoy calculating the area borders.	Learners are guided in pairs, in groups or individually to: Trace a picture frame on a piece of paper. State the formula for calculating the area of borders. Work out the area of various borders.	What is the formula for calculating the area of a boarder?	Smart Minds Mathematics Learner's Book Grade 7 pg. 119-121  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>3</b>	MEASURE MENT	Area of combined shapes	By the end of the lesson, the learner should be able to: a) State the formula for calculating the area of combined shapes. b) Work out the area of various combined shapes. c) Have fun and enjoy calculating the area combined shapes.	Learners are guided in pairs, in groups or individually to: Draw and make cutouts of different shapes. State the formula for calculating the area of combined shapes. Work out the area of various combined shapes.	What is the formula for calculating the area of combined shapes?	Smart Minds Mathematics Learner's Book Grade 7 pg. 119-121  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>4</b>	MEASURE MENT	Volume and capacity  The cubic meter ( $m^3$ ) as a unit of measuring volume	By the end of the lesson, the learner should be able to: a) Cut sticks of 1m each using a panga and observe safety b) Join sticks of 1m each to form a cube and find its volume. c) Appreciate the cubic meter as a unit of measuring volume	Learners are guided in pairs, in groups or individually to: Define volume. Cut sticks of 1m each using a panga and observe safety Join sticks of 1m each to form a cube and find its volume.	What the volume of the cube?	Smart Minds Mathematics Learner's Book Grade 7 pg. 122  Pieces of paper Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

	5	MEASURE MENT	Volume and capacity  Converting cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> )	By the end of the lesson, the learner should be able to: a) Identify the formula of converting cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> ). b) Convert cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> ) c) Appreciate the relationship between cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> ).	Learners are guided in pairs, in groups or individually to: Identify the formula of converting cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> ). Convert cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> )	What is the formula for converting cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> )?	Smart Minds Mathematics Learner's Book Grade 7 pg. 123  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
7	1	MEASURE MENT	Volume and capacity  Converting cubic centimetres (cm <sup>3</sup> ) into cubic metres (m <sup>3</sup> )	By the end of the lesson, the learner should be able to: a) Identify the formula of converting cubic centimetres (cm <sup>3</sup> ) into cubic metres (m <sup>3</sup> ). b) Convert cubic centimetres (cm <sup>3</sup> ) into cubic metres (m <sup>3</sup> ) c) Appreciate the relationship between cubic centimetres (cm <sup>3</sup> ) into cubic metres (m <sup>3</sup> ).	Learners are guided in pairs, in groups or individually to: State the relationship between centimetres cuboid and metres cuboid. Identify the formula of converting cubic centimetres (cm <sup>3</sup> ) into cubic metres (m <sup>3</sup> ). Convert cubic centimetres (cm <sup>3</sup> ) into cubic metres (m <sup>3</sup> )	What is the formula for converting cubic metres (m <sup>3</sup> ) into cubic centimetres (cm <sup>3</sup> )?	Smart Minds Mathematics Learner's Book Grade 7 pg. 124  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	MEASURE MENT	Volume and capacity  Volume of cubes	By the end of the lesson, the learner should be able to: a) Measure the length, width and height of the cube using a ruler. b) Calculate the volume of the cube formed using the measurements. c) Enjoy calculating the volume of cube.	Learners are guided in pairs, in groups or individually to: Make or draw a cube. Measure the length, width and height of the cube using a ruler. Calculate the volume of the cube formed using the measurements.	What is a cube?  How do you calculate the volume of a cube?	Smart Minds Mathematics Learner's Book Grade 7 pg. 125- 126  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

	3	MEASURE MENT	Volume and capacity  Volume of cuboids	By the end of the lesson, the learner should be able to: a) Measure the length, width and height of the cuboid using a ruler. b) Calculate the volume of the cuboid formed using the measurements. c) Enjoy calculating the volume of cuboid.	Learners are guided in pairs, in groups or individually to: Make or draw a cuboid. Measure the length, width and height of the cuboid using a ruler. Calculate the volume of the cuboid formed using the measurements.	What is a cuboid?  How do you calculate the volume of cuboid?	Smart Minds Mathematics Learner's Book Grade 7 pg. 127- 129  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	4	MEASURE MENT	Volume and capacity  Volume of a cylinder	By the end of the lesson, the learner should be able to: a) State the formula to calculate the volume of a cylinder. b) Calculate the volume of a cylinder. c) Enjoy working out volume of various cylinders.	Learners are guided in pairs, in groups or individually to: Draw a cylinder in their exercise books. State the formula to calculate the volume of a cylinder. Calculate the volume of a cylinder.	What is a cylinder?  How do you calculate the volume of cylinder?	Smart Minds Mathematics Learner's Book Grade 7 pg. 129- 131  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	5	MEASURE MENT	Volume and capacity  Relationship between cubic centimeters (cm <sup>3</sup> ), cubic meters (m <sup>3</sup> ) and litres	By the end of the lesson, the learner should be able to: a) Make a model cube of sides 10cm each and find its volume. b) Determine the relationship between cubic centimeters (cm <sup>3</sup> ), cubic meters (m <sup>3</sup> ) and litres c) Appreciate the relationship between cubic centimeters (cm <sup>3</sup> ), cubic meters (m <sup>3</sup> ) and litres	Learners are guided in pairs, in groups or individually to: Make a model cube of sides 10cm each and find its volume. Determine the relationship between cubic centimeters (cm <sup>3</sup> ), cubic meters (m <sup>3</sup> ) and litres.	What is the volume of the cube?	Smart Minds Mathematics Learner's Book Grade 7 pg. 131- 132  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
8				<b>MIDTERM BREAK</b>					

9	1	MEASURE MENT	Volume and capacity  Relating between volume and capacity	By the end of the lesson, the learner should be able to: a) Define capacity and state the relationship between volume and capacity. b) Convert volume to capacity and vice versa. c) Appreciate the relationship between volume and capacity.	Learners are guided in pairs, in groups or individually to: Define capacity. State the relationship between volume and capacity. Outline the formula of converting volume and capacity. Use digital devices to play games.	What is the relationship between volume and capacity?  How do you convert volume to capacity and vice versa?	Smart Minds Mathematics Learner's Book Grade 7 pg. 133- 134  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	MEASURE MENT	Time, distance speed  Units of measuring time	By the end of the lesson, the learner should be able to: a) Tell the current time using the classroom clock. b) List the units used for measuring time. c) Appreciate the importance of reading time.	Learners are guided in pairs, in groups or individually to: Draw a clock as shown in learner's book. Tell the current time using the classroom clock. List the units used for measuring time.	What is the time now?	Smart Minds Mathematics Learner's Book Grade 7 pg. 134- 136  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	3	MEASURE MENT	Time, distance speed  Conversion of units of time – hours into minutes	By the end of the lesson, the learner should be able to: a) Create a conversion table on units of time. b) Convert hours into minutes. c) Appreciate the importance of reading time.	Learners are guided in pairs, in groups or individually to: Create a conversion table on units of time. Convert hours into minutes. Work out task 2	1 hour has how many minutes?	Smart Minds Mathematics Learner's Book Grade 7 pg. 136- 137  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	4	MEASURE MENT	Time, distance speed  Conversion of units of time –	By the end of the lesson, the learner should be able to: a) Create a conversion table on units of time. b) Convert minutes into hours.	Learners are guided in pairs, in groups or individually to: Create a conversion table on units of time. Convert minutes into hours. Work out task 3	120 minutes has how many hours?	Smart Minds Mathematics Learner's Book Grade 7 pg. 137- 138  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

			minutes into hours	c) Appreciate the importance of reading time.					
	<b>5</b>	MEASUREMENT	Time, distance speed  Conversion of units of time – minutes into seconds	By the end of the lesson, the learner should be able to: a) Explain how to convert minutes into seconds. b) Convert minutes into seconds. c) Appreciate the importance time in everyday life.	Learners are guided in pairs, in groups or individually to: Explain how to convert minutes into seconds. Convert minutes into seconds. Work out task 4	120 seconds has how many minutes?	Smart Minds Mathematics Learner's Book Grade 7 pg. 138-139  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
<b>10</b>	<b>1</b>	MEASUREMENT	Time, distance speed  Conversion of units of time – seconds into minutes	By the end of the lesson, the learner should be able to: a) Explain how to convert seconds into minutes. b) Convert seconds into minutes. c) Appreciate the importance time in everyday life.	Learners are guided in pairs, in groups or individually to: Explain how to convert seconds into minutes. Convert seconds into minutes. Work out task 5	3600 seconds has how many minutes?	Smart Minds Mathematics Learner's Book Grade 7 pg. 139-140  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>2</b>	MEASUREMENT	Time, distance speed  Conversion of units of time – hours into seconds	By the end of the lesson, the learner should be able to: a) Create a conversion table on units of time. b) Convert hours into seconds. c) Appreciate the importance of reading time.	Learners are guided in pairs, in groups or individually to: Create a conversion table on units of time. Convert hours into seconds. Work out task 6	1 hour has how many seconds?	Smart Minds Mathematics Learner's Book Grade 7 pg. 140-141  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>3</b>	MEASUREMENT	Time, distance speed  Conversion of units of time – seconds into hours	By the end of the lesson, the learner should be able to: a) Create a conversion table on units of time. b) Convert seconds into hours. c) Appreciate the importance of reading time.	Learners are guided in pairs, in groups or individually to: Create a conversion table on units of time. Convert seconds into hours. Work out task 7	1800 seconds has how many hours?	Smart Minds Mathematics Learner's Book Grade 7 pg. 141-142  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

	<b>4</b>	MEASURE MENT	Time, distance speed  Units of measuring distance – kilometres into metres	By the end of the lesson, the learner should be able to: a) State the importance of converting distance from metres to km. b) Convert the distance from km to metres in real life situations. c) Appreciate the importance of converting distance from metres to km.	Learners are guided in pairs, in groups or individually to: Discuss and estimate distances between two or more points. State the importance of converting distance from metres to km. Convert the distance from km to metres in real life situation.	What is the formula of converting distance from km to metres?	Smart Minds Mathematics Learner's Book Grade 7 pg. 142- 143  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>5</b>	MEASURE MENT	Time, distance speed  Units of measuring distance – metres to kilometres	By the end of the lesson, the learner should be able to: a) State the importance of converting distance from metres to kilometres. b) Convert the distance from metres to kilometres in real life situations. c) Appreciate the importance of converting distance from metres to kilometres	Learners are guided in pairs, in groups or individually to: Discuss and estimate distances between two or more points. State the importance of converting distance from metres to kilometres. Convert the distance from metres to kilometres in real life situation.	What is the formula of converting distance from metres to kilometres?	Smart Minds Mathematics Learner's Book Grade 7 pg. 143- 144  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
<b>11</b>	<b>1</b>	MEASURE MENT	Time, distance speed  Speed – speed in kilometres per hour	By the end of the lesson, the learner should be able to: a) Define speed. b) Estimate the speeds in km/h of various distances and time. c) Enjoy calculating speed in km/h.	Learners are guided in pairs, in groups or individually to: Define speed. Estimate the speeds in km/h of various distances and time. Work out task 10	What is the distance covered by a bus travelling at the speed of 80 km/h and takes 3 hours?	Smart Minds Mathematics Learner's Book Grade 7 pg. 144- 146  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>2</b>	MEASURE MENT	Time, distance speed	By the end of the lesson, the learner should be able to:	Learners are guided in pairs, in groups or individually to:	What is the distance covered by a bus	Smart Minds Mathematics	Class activities Written tests Home Assignments	

			Speed – speed in metres per second	a) Explain how to convert speed in to meters per second. b) Estimate the speeds in m/s of various distances and time. c) Enjoy calculating speed in m/s.	Explain how to convert speed in to meters per second. Estimate the speeds in m/s of various distances and time. Work out task 11	travelling at the speed of 60 m/s and takes 300 seconds?	Learner's Book Grade 7 pg. 146-147  Ruler Digital devices	Oral questions Checklists Portfolio Observation	
	3	MEASUREMENT	Time, distance speed  Conversion of units of speed – converting km/h to m/s	By the end of the lesson, the learner should be able to: a) State the formula of converting km/h to m/s b) Convert km/h to m/s in real life situations. c) Enjoy converting km/h to m/s.	Learners are guided in pairs, in groups or individually to: State the formula of converting km/h to m/s Convert km/h to m/s and in real life situations.	How do you convert km/h to m/s?	Smart Minds Mathematics Learner's Book Grade 7 pg. 147-148  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	4	MEASUREMENT	Time, distance speed  Conversion of units of speed – converting m/s to km/h	By the end of the lesson, the learner should be able to: a) State the formula of converting m/s to km/h b) Convert m/s to km/h in real life situations. c) Enjoy converting m/s to km/h.	Learners are guided in pairs, in groups or individually to: State the formula of converting m/s to km/h Convert m/s to km/h in real life situations. Play games using digital devices.	How do you convert m/s to km/h?	Smart Minds Mathematics Learner's Book Grade 7 pg. 148-149  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	5	MEASUREMENT	Temperature  The temperature in our environment	By the end of the lesson, the learner should be able to: a) Define temperature. b) Describe the temperature conditions of the immediate environment as warm, hot or cold. c) Appreciate different kind of temperature.	Learners are guided in pairs, in groups or individually to: Define temperature. Describe the temperature conditions of the immediate environment as warm, hot or cold. Draw the images in learner's book.	What is temperature ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 149-150  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	

12	1	MEASURE MENT	Temperature  Comparing temperature	By the end of the lesson, the learner should be able to: a) Compare temperature using hotter, warmer, colder and same as in different situations. b) Work out temperature in degree Celsius and kelvin. c) Appreciate the tools used to measure temperature.	Learners are guided in pairs, in groups or individually to: Identify the tools used to measure temperature. Compare temperature using hotter, warmer, colder and same as in different situations. Work out temperature in degree Celsius and kelvin.	What is the room temperature ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 150-151  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	MEASURE MENT	Temperature  Units of measuring temperature	By the end of the lesson, the learner should be able to: a) Name the instrument used to measure temperature. b) Identify the units of measuring temperature (degree Celsius and Kelvin). c) Appreciate the units of measuring temperature.	Learners are guided in pairs, in groups or individually to: Name the instrument used to measure temperature. Identify the units of measuring temperature (degree Celsius and Kelvin).	Which instrument is used for measuring temperature ?	Smart Minds Mathematics Learner's Book Grade 7 pg. 151-153  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	3	MEASURE MENT	Temperature  Converting temperature in degree Celsius to Kelvin	By the end of the lesson, the learner should be able to: a) Discuss the relationship between Kelvin and degrees Celsius. b) Convert units of measuring temperature from degree Celsius to Kelvin. c) Appreciate the relationship between Kelvin and degrees Celsius.	Learners are guided in pairs, in groups or individually to: Discuss the relationship between Kelvin and degrees Celsius. Convert units of measuring temperature from degree Celsius to Kelvin. Work out task 4	What is the relationship between Kelvin and degrees Celsius?	Smart Minds Mathematics Learner's Book Grade 7 pg. 153-154  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	4	MEASURE MENT	Temperature  Converting temperature	By the end of the lesson, the learner should be able to: a) Explain how to convert Kelvin to degree Celsius.	Learners are guided in pairs, in groups or individually to:	290 Kelvin is equivalent to how	Smart Minds Mathematics	Class activities Written tests Home Assignments	



			in Kelvin to degree Celsius	b) Convert units of measuring temperature from Kelvin to degree Celsius c) Appreciate the relationship between Kelvin and degrees Celsius.	Explain how to convert Kelvin to degree Celsius. Convert units of measuring temperature from Kelvin to degree Celsius Work out task 5	many degrees Celsius?	Learner's Book Grade 7 pg. 154-155  Ruler Digital devices	Oral questions Checklists Portfolio Observation	
	5	MEASUREMENT	Temperature  Temperature in degree Celsius and Kelvin	By the end of the lesson, the learner should be able to: a) Read the temperatures of the day in the given table and answer the questions that follow. b) Determine the rise in temperature given different scenarios c) Appreciate the relationship between Kelvin and degrees Celsius.	Learners are guided in pairs, in groups or individually to: Read the temperatures of the day in the given table and answer the questions that follow. Determine the rise in temperature given different scenarios Work out task 6	What is the rise in temperature from 200 Kelvin to 291 Kelvin?	Smart Minds Mathematics Learner's Book Grade 7 pg. 155-157  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
13	1	MEASUREMENT	Money  Profit	By the end of the lesson, the learner should be able to: a) State the formula of working out profit. b) Calculate the profit in word problems. c) Appreciate the importance of calculating profits in businesses.	Learners are guided in pairs, in groups or individually to: Define profit. State the formula of working out profit. Calculate the profit in word problems. Workout task 1.	How do you calculate profit?	Smart Minds Mathematics Learner's Book Grade 7 pg. 157-158  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	2	MEASUREMENT	Money  Loss	By the end of the lesson, the learner should be able to: a) State the formula of working out loss. b) Calculate loss in word problems.	Learners are guided in pairs, in groups or individually to: Define the term loss. State the formula of working out loss.	How do you calculate loss?	Smart Minds Mathematics Learner's Book Grade 7 pg. 158-159  Ruler	Class activities Written tests Home Assignments Oral questions Checklists Portfolio	

				c) Appreciate the importance of calculating loss in businesses.	Calculate loss in word problems.		Digital devices	Observation	
	<b>3</b>	MEASURE MENT	Money  Percentage profit	By the end of the lesson, the learner should be able to: a) State the formula of working out percentage profit. b) Calculate percentage profit in word problems. c) Appreciate the importance of calculating profits in businesses.	Learners are guided in pairs, in groups or individually to: Define percentage profit. State the formula of working out percentage profit. Calculate percentage profit in word problems. Workout task 3.	How do you calculate percentage profit?	Smart Minds Mathematics Learner's Book Grade 7 pg. 160-161  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>4</b>	MEASURE MENT	Money  Percentage Loss	By the end of the lesson, the learner should be able to: a) State the formula of working out percentage loss. b) Calculate percentage loss in word problems. c) Appreciate the importance of calculating loss in businesses.	Learners are guided in pairs, in groups or individually to: Define the term percentage loss. State the formula of working out loss. Calculate percentage loss in word problems.	How do you calculate percentage loss?	Smart Minds Mathematics Learner's Book Grade 7 pg. 162-163  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
	<b>5</b>	MEASURE MENT	Money  Discount	By the end of the lesson, the learner should be able to: a) Define discount and explain how to find discount. b) Find discount in word problems. c) Appreciate discount in real life situations	Learners are guided in pairs, in groups or individually to: Define discount and explain how to find discount. Find discount in word problems.	What is discount?	Smart Minds Mathematics Learner's Book Grade 7 pg. 164-165  Ruler Digital devices	Class activities Written tests Home Assignments Oral questions Checklists Portfolio Observation	
<b>14</b>				<b>END OF TERM TWO ASSESSMENT</b>					