

ENGLISH MATHEMATICS _2021 WEEKLY TEACHING PLAN _ GRADE 6

TERM 1	Week 1 3 days	Week 2 5 days	Week 3 5 days	Week 4 5 days:	Week 5 5 days	Week 6 5 days	Week 7 5 days	Week 8 5 days	Week 9 4 days	Week 10 3 days
Hours per week	3 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	5 hrs.	3 hrs.
Hours per topic	3 hrs.	6 hrs.	12 hrs.		12 hrs.		2 hrs	12 hrs.		6 hrs.
Topics, concepts and skills	REVISION OF GRADE 5 WEEK	WHOLE NUMBERS: Counting, ordering, comparing, representing and place value (6 – 9 digit numbers) <ul style="list-style-type: none"> Order, compare and represent numbers up to at least 9-digit numbers Represent prime numbers to at least 100 Recognize the place value of digits in whole numbers to at least 9-digit numbers Round off to the nearest 5, 10, 100 and 1 000 	ADDITION AND SUBTRACTION: Number range for calculations <ul style="list-style-type: none"> Addition and subtraction of whole numbers with at least 5-digit and 6-digit numbers Calculation techniques <ul style="list-style-type: none"> Using a range of techniques to perform and check written and mental calculations with whole numbers including: <ul style="list-style-type: none"> estimation adding, subtracting in columns building up and breaking down numbers rounding off and compensating using a number line using addition and subtraction as inverse operations using a calculator Properties of whole numbers <ul style="list-style-type: none"> Recognize and use the commutative; associative; distributive properties of whole numbers 0 in terms of its additive property Solving problems <ul style="list-style-type: none"> Solve problems involving whole numbers and decimal fractions, including: <ul style="list-style-type: none"> financial contexts mmeasurement contexts 	WHOLE NUMBERS: Multiplication Number range for calculations <ul style="list-style-type: none"> Multiplication of at least whole 4-digit by 3-digit numbers Multiple operations on whole numbers with or without brackets Calculation techniques include <ul style="list-style-type: none"> Using a range of techniques to perform and check written and mental calculations with whole numbers including: <ul style="list-style-type: none"> estimation multiplying in columns building up and breaking down numbers doubling and halving using multiplication and division as inverse operations using a calculator Number range for multiples and factors <ul style="list-style-type: none"> Multiples of 2-digit and 3-digit numbers Factors of 2-digit and 3-digit whole numbers Prime factors of numbers to at least 100 Properties of whole numbers <ul style="list-style-type: none"> Recognize and use the commutative; associative; distributive properties of whole numbers 1 in terms of its multiplicative property Solving problems	FORMAL ASSESSMENT TASK ASSIGNMENT Counting, ordering, comparing, representing and place value Addition and subtraction Multiplication	WHOLE NUMBERS: Division Number range for calculations <ul style="list-style-type: none"> Division of at least whole 4-digit by 3-digit numbers Multiple operations on whole numbers with or without brackets Calculation techniques <ul style="list-style-type: none"> Using a range of techniques to perform and check written and mental calculations with whole numbers including: <ul style="list-style-type: none"> estimation between multiplication and division long division building up and breaking down numbers doubling and halving using multiplication and division as inverse operations using a calculator Number range for multiples and factors <ul style="list-style-type: none"> Multiples of 2-digit and 3-digit numbers Factors of 2-digit and 3-digit whole numbers Prime factors of numbers up to at least 100 Properties of whole numbers <ul style="list-style-type: none"> Recognize and use the commutative; associative; distributive properties of whole numbers 1 in terms of its multiplicative property 	FORMAL ASSESSMENT TASK TEST All topics			

				<ul style="list-style-type: none"> • Solve problems involving whole numbers and decimal fractions, including: <ul style="list-style-type: none"> – financial contexts – measurement contexts • Solve problems involving whole numbers, including: <ul style="list-style-type: none"> – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate) 		<p>Solving problems</p> <ul style="list-style-type: none"> • Solve problems involving whole numbers and decimal fractions, including: <ul style="list-style-type: none"> – financial contexts – measurement contexts • Solve problems involving whole numbers, including: <ul style="list-style-type: none"> – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate) <p>grouping and equal sharing with remainders</p>	
Prerequisite skill or pre-knowledge		<ul style="list-style-type: none"> • Counting, ordering, comparing, representing and place value of (4 – 6 digit numbers) • Represent odd and even numbers to at least 1 000. 	<ul style="list-style-type: none"> • Addition and Subtraction of 5-digit numbers • Properties of operations with whole numbers 	<ul style="list-style-type: none"> • Multiplication of 3-digit by 2-digit numbers • Prime numbers • Multiples of 2-digits whole numbers to at least 100 • Factors of 2-digit whole numbers to at least 100 • Properties of operations with whole numbers 		<ul style="list-style-type: none"> • Division of 3-digit by 2-digit numbers • Multiples of 2-digits whole numbers to at least 100 • Factors of 2-digit whole numbers to at least 100 • Properties of operations with whole numbers 	

TERM 2	Week 1 4 days	Week 2 5 days	Week 3 3 days	Week 4 5 days	Week 5 5 days	Week 6 5 days	Week 7 5 days	Week 8 5 days	Week 9 5 days	Week 10 4 days	Week 11 5 days	
Hours per week	5 hrs.	6 hrs.	3 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	5 hrs.	6 hrs.	
Hours per topic	6 hrs		9 hrs		6 hrs		15 hrs		2 hrs.		12 hrs	
Topics, concepts and skills	NUMBER SENTENCES <ul style="list-style-type: none"> Write number sentences to describe problem situations Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement Check solutions by substitution 	NUMERIC PATTERNS <p>Investigate and extend patterns</p> <ul style="list-style-type: none"> Investigate and extend numeric patterns looking for relationships or rules of patterns: <ul style="list-style-type: none"> sequences involving a constant difference or ratio of learner's own creation represented in tables Describe observed relationships or rules in learner's own words <p>Input and output values</p> <ul style="list-style-type: none"> Determine input values, output values and rules for the patterns and relationships using: <ul style="list-style-type: none"> flow diagrams tables <p>Equivalent forms</p> <ul style="list-style-type: none"> Determine equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> verbally in a flow diagram by a number sentence 	GEOMETRIC PATTERNS <p>Investigate and extend patterns</p> <ul style="list-style-type: none"> Investigate and extend numeric patterns looking for relationships or rules of patterns: <ul style="list-style-type: none"> represented in physical or diagram form sequences involving a constant difference or ratio of learner's own creation Describe observed relationships or rules in learner's own words <p>Input and output values</p> <ul style="list-style-type: none"> Determine input values, output values and rules for the patterns and relationships using: <ul style="list-style-type: none"> flow diagrams tables <p>Equivalent forms</p> <ul style="list-style-type: none"> Determine equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> verbally in a flow diagram by a number sentence 	COMMON FRACTIONS <p>Describing and ordering fractions:</p> <ul style="list-style-type: none"> Compare and order common fractions, including specifically tenths and hundredths <p>Calculations with fractions:</p> <ul style="list-style-type: none"> Addition and subtraction of common fractions in which one denominator is a multiple of another Addition and subtraction of mixed numbers Fractions of whole numbers <p>Solving problems</p> <ul style="list-style-type: none"> Solve problems in contexts involving common fractions, including grouping and sharing <p>Percentages</p> <ul style="list-style-type: none"> Find percentages of whole numbers <p>Equivalent forms:</p> <ul style="list-style-type: none"> Recognize and use equivalent forms of common fractions with 1-digit or 2-digit denominators (fractions in which one denominator is a multiple of another) Recognize equivalence between common fraction, decimal fraction and percentage forms of the same number 	FORMAL ASSESSMENT TASK <p>INVESTIGATION</p> <ul style="list-style-type: none"> Numeric and Geometric Patterns Common Fractions 	DECIMAL FRACTIONS <p>Recognizing, ordering and place value of decimal fractions</p> <ul style="list-style-type: none"> Count forwards and backwards in decimal fractions to at least two decimal places Compare and order decimal fractions to at least two decimal places Place value of digits to at least two decimal places <p>Calculations with decimal fractions</p> <ul style="list-style-type: none"> Addition and subtraction of decimal fractions of at least two decimal places Multiply decimal fractions by 10 and 100 <p>Solving problems</p> <ul style="list-style-type: none"> Solve problems in context involving decimal fractions <p>Equivalent forms:</p> <ul style="list-style-type: none"> Recognize equivalence between common fraction and decimal fraction forms of the same number Recognize equivalence between common fraction, decimal fraction and percentage forms of the same number 	REVISION	FORMAL ASSESSMENT TASK <p>TEST</p> <p>All Term 1 and Term 2 topics</p>				
Prerequisite skill or pre-knowledge	Number sentences at the level of grade 5	<ul style="list-style-type: none"> Investigate and extend patterns Describe patterns in own words Describe general rules observed in patterns Determine input and output values 	<ul style="list-style-type: none"> Investigate and extend patterns Describe patterns in own words 	<ul style="list-style-type: none"> Whole numbers Equal sharing Fractions of whole numbers Equivalence 	<ul style="list-style-type: none"> Common fractions Percentages Compare and order tenths and hundredths Fractions of whole numbers Equivalence 							
TERM 3	Week 1 4 days	Week 2 5 days	Week 3 5 days	Week 4 5 days	Week 5 4 days	Week 6 5 days	Week 7 5 days	Week 8 5 days	Week 9 5 days	Week 10 5 days	Week 11 4 days	

Hours per week	5 hrs.	6 hrs.	6 hrs.	6 hrs.	5 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	5 hrs.			
Hours per topic	6 hrs		12 hrs		6 hrs.		6 hrs		9 hrs		6 hrs.		5 hrs.	
Topics, concepts and skills	LENGTH		PROPERTIES OF 2-D SHAPES		TRANSFORMATIONS		PROPERTIES OF 3-D OBJECTS		AREA, PERIMETER AND VOLUME		CAPACITY AND VOLUME		REVISION	
	Practical measuring <ul style="list-style-type: none"> Estimate and practically measure 2-D shapes and 3-D objects using measuring instruments such as: <ul style="list-style-type: none"> rulers metre sticks tape measures trundle wheels Record, compare and order lengths of shapes and objects in millimetres (mm), centimetres (cm), metres (m), kilometres (km) Calculations and problem-solving <ul style="list-style-type: none"> Solve problems in contexts involving length Convert between millimetres (mm), centimetres (cm), metres (m) and kilometres (km) to include fraction and decimal forms (to 2 decimal places) 		Range of shapes <ul style="list-style-type: none"> Regular and irregular polygons <ul style="list-style-type: none"> triangles, squares, rectangles, parallelograms, other quadrilaterals, pentagons, hexagons, heptagons, octagons Similarities and differences between rectangles and parallelograms Features of shapes <ul style="list-style-type: none"> Describe, sort and compare 2-D shapes in terms of <ul style="list-style-type: none"> number of sides length of sides size of angles <ul style="list-style-type: none"> acute ✓ right ✓ obtuse ✓ straight ✓ reflex ✓ revolution ✓ Further activities <ul style="list-style-type: none"> Draw 2-D shapes on grid paper Draw circles, patterns in circles and patterns with circles using a pair of compasses Angles <ul style="list-style-type: none"> Recognize and name the following angles in 2-D shapes: <ul style="list-style-type: none"> acute right obtuse straight reflex revolution 		Describe patterns <p>Refer to lines, 2-D shapes, 3-D objects and/or lines of symmetry and/ or rotations and/or reflections and/or translations when describing patterns</p> <ul style="list-style-type: none"> in nature from modern everyday life from our cultural heritage Enlargement and reductions <ul style="list-style-type: none"> Draw enlargement and reductions of 2-D shapes to compare size and shape of <ul style="list-style-type: none"> triangles quadrilaterals 		Range of objects <ul style="list-style-type: none"> Recognize, visualize and name 3-D objects in the environment and geometric settings, focusing on: <ul style="list-style-type: none"> rectangular prisms cubes tetrahedrons pyramids similarities and differences between tetrahedrons and other pyramids Characteristics of objects <ul style="list-style-type: none"> Describe, sort and compare 3-D objects in terms of: <ul style="list-style-type: none"> number and shape of faces number of vertices number of edges Further activities <ul style="list-style-type: none"> Make 3-D models using: <ul style="list-style-type: none"> drinking straws, toothpicks etc. nets 		Perimeter <ul style="list-style-type: none"> Measure perimeter using rulers or measuring tapes Measurement of area <ul style="list-style-type: none"> Continue to find areas of regular and irregular shapes by counting squares on grids Develop rules for calculating the areas of squares and rectangles Measurement of volume <ul style="list-style-type: none"> Continue to find volume/capacity of objects by packing or filling them Develop an understanding of why the volume of rectangular prisms is given by length multiplied by width multiplied by height Investigate: <ul style="list-style-type: none"> Relationship between perimeter and area of rectangles and squares. Relationship between surface area and volume of rectangular prisms 		Practical Measuring <ul style="list-style-type: none"> Estimate and practically measure 3-D objects using measuring instruments such as: <ul style="list-style-type: none"> measuring spoons measuring cups, measuring jugs Record, compare and order capacity and volume of 3D objects in millilitres (ml), litres (l) and kilolitres (kl) Calculations and problem-solving <ul style="list-style-type: none"> Solve problems in contexts involving capacity/volume Convert between kilolitres, litres and millilitres to include fraction and decimal forms (to 2 decimal places) 		FORMAL ASSESSMENT TASK <p>TEST</p> <p>All topics</p>	

Prerequisite skill or pre-knowledge	<ul style="list-style-type: none"> • Estimating, measuring, recording, comparing and ordering length • Use Measuring instruments: • Units of length: • Solve problems in contexts • Conversions limited to whole numbers and common fractions 	<ul style="list-style-type: none"> • Similarities and differences between squares and rectangles • Recognize and describe angles in 2-D shapes: <ul style="list-style-type: none"> – right angles – angles smaller than right angles – angles greater than right angles • Describe, sort and compare 2-D shapes in terms of <ul style="list-style-type: none"> – straight and curved sides – number of sides – lengths of sides – angles in shapes, limited to right angles, angles smaller than right angles and angles greater than right angles 	<ul style="list-style-type: none"> • 2D shapes • Symmetry 	<ul style="list-style-type: none"> • Similarities and differences between cubes and rectangular prisms • Describe, sort and compare 3-D objects in terms of: <ul style="list-style-type: none"> – shape of faces – number of faces – flat and curved surfaces 				
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N.B. BY THE END OF TERM 3, LEARNERS SHOULD HAVE COMPLETED A PROJECT AND A TEST. SEE NOTES ON PROJECT FROM ABRIDGED SECTION 4 OF CAPS.

TERM 4	Week 1 4 days	Week 2 5 days	Week 3 5 days	Week 4 5 days:	Week 5 5 days	Week 6 5 days	Week 7 5 days	Week 8 5 days	Week 9 5 days	Week 10 3 days
Hours per week	5 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	3 hrs.
Hours per topic	6 hrs.		6 hrs.		12 hrs.		12 hrs.		6 hrs.	3 hrs.
Topics, concepts and skills	MASS Practical measuring <ul style="list-style-type: none"> Estimate and practically measure 3-D objects using measuring instruments such as: <ul style="list-style-type: none"> bathroom scales (analogue and digital); kitchen scales (analogue and digital) balances Record, compare and order mass of objects in grams (g) and kilograms (kg). Calculations and problem-solving <ul style="list-style-type: none"> Solve problems in contexts involving mass Convert between grams and kilograms to include fraction and decimal forms (to 2 decimal places) 		TIME Reading time and time instruments <ul style="list-style-type: none"> Read, tell and write time in 12-hour and 24-hour formats on both analogue and digital instruments in: <ul style="list-style-type: none"> hours minutes seconds Instruments include clocks, watches and stopwatches Reading calendars Calculations and problem-solving related to time <ul style="list-style-type: none"> Solve problems in contexts involving time Read time zone maps and calculating time differences based on time zones Calculation of time intervals where time is given in: <ul style="list-style-type: none"> seconds and/or minutes; minutes and/or hours hours and /or days days and/or weeks and/or months years and/or decades centuries, decades and years 		DATA HANDLING Collecting and organising data Collect data <ul style="list-style-type: none"> Use tally marks and tables for recording Use simple questionnaires (yes/no type response) Order data from smallest group to largest group N.B PROVIDE LEARNERS WITH DATA TO SAVE TIME Representing data <ul style="list-style-type: none"> Draw a variety of graphs to display and interpret data including: <ul style="list-style-type: none"> pictographs with many-to-one representations bar graphs and double bar graphs Analysing, interpreting and reporting data <ul style="list-style-type: none"> Critically read and interpret data represented in: <ul style="list-style-type: none"> words pictographs bar graphs double bar graphs pie charts Analyse data by answering questions related to: <ul style="list-style-type: none"> data categories, including data intervals data sources and contexts central tendencies – (mode and median) Summarise data verbally and in short written paragraphs that include <ul style="list-style-type: none"> drawing conclusions about the data making predictions based on the data 		USE ALL FOUR BASIC OPERATIONS TO SOLVE PROBLEMS IN CONTEXT Solving problems <ul style="list-style-type: none"> Solve problems in contexts involving whole numbers and fractions, including: <ul style="list-style-type: none"> financial contexts measurement contexts fractions, including grouping and equal sharing comparing two or more quantities of the same kind (ratio) comparing two quantities of different kinds (rate) 		REVISION	FORMAL ASSESSMENT TASK TEST All Term 3 and Term 4 topics
Prerequisite skill or pre-knowledge	<ul style="list-style-type: none"> Estimating, measuring, recording, comparing and ordering mass Calculation of the number of days between any two dates within the same or consecutive years 		<ul style="list-style-type: none"> Number sentences 							

	<ul style="list-style-type: none">• Use Measuring instruments• Units of mass• Solve problems in contexts• Conversions limited to whole numbers and common fractions	<ul style="list-style-type: none">• Calculation of time intervals where time is given in minutes or hours only	<ul style="list-style-type: none">• All operations with whole numbers, common fractions and decimal fractions			
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