| TERM 1 | WEEK 1 WEEK 2 | WEEK 3 WEEK 4 | WEEK 5 WEEK 6 | WEEK 7 | WEEK 8 WEEK 9 | WEEK 10 | WEEK 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HOURS PER TOPIC | 9 hrs | 12 hrs | 12 hrs | 3 hrs | 12 hrs | $3 / 6 \mathrm{hrs}$ | $6 / 3 \mathrm{hrs}$ |
| TOPICS, CONCEPTS AND SKILLS | REVISION OF GRADE 5 WORK (to be integrated into the topics, accordingly) <br> WHOLE NUMBERS <br> Counting, ordering, comparing, representing and place value (6-9digit numbers) <br> - Order, compare and represent numbers up to at least 9 -digit numbers <br> - Represent prime numbers to at least 100 <br> - Recognize the place value of digits in whole numbers to at least 9 -digit numbers <br> - Round off to the nearest $5,10,100$ and 1000 | WHOLE NUMBERS <br> Addition and subtraction <br> Number range for calculations <br> - Addition and subtraction of whole numbers with at least 5 -digit and 6 -digit numbers <br> Calculation techniques <br> - Use any two of the range of techniques to perform and check written and mental calculations with whole numbers including: <br> - Estimation <br> - Adding, subtracting in columns <br> - Building up and breaking down numbers <br> - Rounding off and compensating <br> - Using a number line <br> - Using addition and subtraction as inverse operations <br> - Using a calculator <br> Note: <br> - Ensure that the strategies used do not compromise conceptual understanding <br> - Calculator must only be used to check the correctness of the solution <br> Properties of whole numbers <br> - Recognise and use the commutative, associative, distributive properties of whole numbers <br> - 0 in terms of its additive property <br> Solving problems <br> - Solve problems involving whole numbers, including: <br> - Financial contexts <br> - Measurement contexts | WHOLE NUMBERS <br> Multiplication <br> Number range for calculations <br> - Multiplication of at least whole 4-digit by 3-digit numbers <br> - Multiple operations on whole numbers with or without brackets <br> Calculation techniques <br> - Use any two of the range of techniques to perform and check written and mental calculations with whole numbers including: <br> - Estimation <br> - Multiplying in columns <br> - Building up and breaking down numbers <br> - Doubling and halving <br> - Using multiplication and division as inverse operations <br> - Using a calculator <br> Note: <br> - Ensure that the strategies used do not compromise conceptual understanding <br> - Calculator must only be used to check the correctness of the solution <br> Number range for multiples and factors <br> - Multiples of 2-digit and 3-digit numbers <br> - Factors of 2-digit and 3-digit whole numbers <br> - Prime factors of numbers to at least 100 <br> Properties of whole numbers <br> - Recognise and use the commutative, associative, distributive properties of whole numbers <br> - 1 in terms of its multiplicative property <br> Solving problems <br> - Solve problems involving whole numbers, including: <br> - Financial contexts <br> - Measurement contexts <br> - Comparing two or more quantities of the same kind (ratio) <br> - Comparing two quantities of different kinds (rate) | FORMAL <br> ASSESSMENT TASK <br> ASSIGNMENT <br> Whole numbers <br> - Counting, ordering, comparing, representing and place value <br> - Addition and subtraction <br> - Multiplication <br> Note: Assignment to be completed in class within 3 hrs | WHOLE NUMBERS <br> Division <br> Number range for calculations <br> - Division of at least whole 4-digit by 3-digit numbers <br> - Multiple operations on whole numbers with or without brackets <br> Calculation techniques <br> - Use any two of the range of techniques to perform and check written and mental calculations with whole numbers including: <br> - Estimation <br> - Long division <br> - Building up and breaking down numbers <br> - Using multiplication and division as inverse operations <br> - Using a calculator <br> Note: <br> - Ensure that the strategies used do not compromise conceptual understanding <br> - Calculator must only be used to check the correctness of the solution <br> Properties of whole numbers <br> - Recognise and use the distributive property of whole numbers <br> - 1 in terms of its multiplicative property <br> Solving problems <br> - Solve problems involving whole numbers, including: <br> - Financial contexts <br> - Measurement contexts <br> - Comparing two or more quantities of the same kind (ratio) <br> - Comparing two quantities of different kinds (rate) <br> - Grouping and equal sharing with remainders | REVISION | FORMAL ASSESSMENT TASK TEST All topics |
| PREREQUISITE SKILL OR PREKNOWLEDGE | - Counting, ordering, comparing, representing and place value of (4-6digit numbers) <br> - Represent odd and even numbers to at least 1000. | - Addition and subtraction of 5 -digit numbers <br> - Properties of operations with whole numbers | - Multiplication of 3-digit by 2 -digit numbers <br> - Prime numbers <br> - Multiples of 2 -digits whole numbers to at least 100 <br> - Factors of 2-digit whole numbers to at least 100 <br> - Properties of operations with whole numbers |  | - Division of 3-digit by 2 -digit numbers <br> - Multiples of 2-digits whole numbers to at least 100 <br> - Factors of 2-digit whole numbers to at least 100 <br> - Properties of operations with whole numbers |  |  |

2023/24 ANNUAL TEACHING PLANS: MATHEMATICS: GRADE 6 (TERM 2)


## 2023/24 ANNUAL TEACHING PLANS: MATHEMATICS: GRADE 5 (TERM 3)

| TERM 3 <br> HOURS PER TOPIC |  | WEEK 1 WE | K 2 | WEEK 3 | WEEK 4 | WEEK 5 WEEK 6 | WEEK 7 | WEEK 8 WEEK 9 | WEEK 10 | WEEK 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6 hrs | 12 hrs |  |  | 9 hrs | 6 hrs | 9 hrs | 6 hrs | 4 hrs |
| TOPICS, CONCEPTS AND SKILLS | FORMAL ASSESSMENT TASK PROJECT <br> Note: The project must cover a combination of topics from term 1-3 and must be completed before the end of term 3 | LENGTH <br> Practical measuring <br> - Estimate and practically measure 2 D shapes and 3D objects using measuring instruments such as: <br> - Rulers <br> - Metre sticks <br> - Tape measures <br> - Trundle wheels <br> - Record, compare and order lengths of shapes and objects in millimetres ( mm ), centimetres ( cm ), metres ( m ), kilometres (km) <br> Calculations and problem-solving <br> - Solve problems in contexts involving length <br> - Convert between millimetres (mm), centimetres (cm), metres ( $m$ ) and kilometres (km) <br> - Conversions should include common fractions and decimal fractions forms to 2 decimal places | PROPERTIES OF 2D SHAPES <br> Range of shapes <br> - Regular and irregular polygons <br> - Triangles, squares, rectangles, parallelograms, other quadrilaterals, pentagons, hexagons, heptagons, octagons <br> - Similarities and differences between rectangles and parallelograms <br> Features of shapes <br> - Describe, sort and compare 2D shapes in terms of <br> - Number of sides <br> - Length of sides <br> - Size of angles <br> $\checkmark$ Acute <br> $\checkmark$ Right <br> $\checkmark$ Obtuse <br> $\checkmark$ Straight <br> $\checkmark$ Reflex <br> $\checkmark$ Revolution <br> Further activities <br> - Draw 2D shapes on grid paper <br> - Draw circles, patterns in circles and patterns with circles using a pair of compasses <br> Angles <br> - Recognise and name the following angles in 2D shapes: <br> - Acute <br> - Right <br> - Obtuse <br> - Straight <br> - Reflex <br> - Revolution |  |  | SYMMETRY <br> Recognize, draw and describe lines of symmetry in 2-D shapes <br> TRANSFORMATIONS ( 6 hrs ) <br> Use transformations to make composite shapes <br> Make composite 2D shapes including shapes with line symmetry by tracing and moving a 2D shape in one or more of the following ways: <br> By rotation <br> By translation <br> By reflection <br> Use transformations to make tessellations <br> Make tessellated patterns including some patterns with line symmetry by tracing and moving 2 D shapes in one or more of the following ways: <br> By rotation <br> By translation <br> By reflection <br> Describe patterns <br> Refer to lines, 2D shapes, 3D objects and/or lines of symmetry and/or rotations and/or reflections and/or translations when describing patterns: <br> In nature <br> From modern everyday life <br> From our cultural heritage <br> Enlargement and reductions <br> Draw enlargement and reductions of 2 D shapes to compare size and shape of <br> Triangles <br> Quadrilaterals | PROPERTIES OF 3D OBJECTS <br> Range of objects <br> - Recognise, visualize and name 3-D objects in the environment and geometric settings, focusing on: <br> - rectangular prisms <br> - cubes <br> - tetrahedrons <br> - pyramids <br> - Similarities and differences between tetrahedrons and other pyramids <br> Characteristics of objects <br> - Describe, sort and compare 3-D objects in terms of: <br> - number and shape of faces <br> - number of vertices <br> - number of edges <br> Further activities <br> - Make 3D models using: <br> - drinking straws, toothpicks etc. <br> - nets | AREA, PERIMETER AND VOLUME <br> Perimeter <br> - Measure perimeter using rulers or measuring tapes <br> Measurement of area <br> - Continue to find areas of regular and irregular shapes by counting squares on grids <br> - Develop rules for calculating the areas of squares and rectangles <br> Measurement of volume <br> - Continue to find volume/capacity of objects by packing or filling them <br> - Develop an understanding of why the volume of rectangular prisms is given by length multiplied by width multiplied by height <br> Investigate <br> - Relationship between perimeter and area of rectangles and squares. <br> - Relationship between surface area and volume of rectangular prisms | REVISION | FORMAL ASSESSMENT TASKS TEST <br> All term 3 topics |

2023/24 ANNUAL TEACHING PLANS: MATHEMATICS: GRADE 6


## 2023/24 ANNUAL TEACHING PLANS: MATHEMATICS: GRADE 6 (TERM 4)

| TERM 4 | WEEK 1 WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 WEEK 6 | WEEK 7 | WEEK 8 | WEEK 9 WEEK 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HOURS PER TOPIC | 9 hrs | 6 hrs | 6 hrs | 12 hrs | 6 hrs | 6 hrs | $6 \mathrm{hrs} \quad 3 \mathrm{hrs}$ |
| TOPICS, CONCEPTS AND SKILLS | MASS <br> Practical measuring <br> - Estimate and practically measure 3D objects using measuring instruments such as: <br> - Bathroom scales (analogue and digital); <br> - Kitchen scales (analogue and digital) <br> - Balances <br> - Record, compare and order mass of objects in grams (g) and kilograms (kg) <br> Calculations and problemsolving <br> - Solve problems in contexts involving mass <br> - Convert between grams and kilograms to include fraction and decimal forms (to 2 decimal places) | TIME <br> Reading time and time instruments <br> - Read, tell and write time in 12-hour and 24 -hour formats on both analogue and digital instruments in: <br> - Hours <br> - Minutes <br> - Seconds <br> - Instruments include clocks, watches and stopwatches <br> Reading calendars <br> Calculations and problem-solving related to time <br> - Solve problems in contexts involving time <br> - Read time zone maps and calculating time differences based on time zones <br> - Calculation of time intervals where time is given in: <br> - Seconds and/or minutes; <br> - Minutes and/or hours <br> - Hours and /or days <br> - Days and/or weeks and/or months <br> - Years and/or decades <br> - Centuries and/or decades and/or years | CAPACITY AND VOLUME <br> Practical measuring <br> - Estimate and practically measure 3D objects using measuring instruments such as: <br> - Measuring spoons <br> - Measuring cups, <br> - Measuring jugs <br> - Record, compare and order capacity and volume of 3D objects in millilitres ( ml ), litres ( $(\mathrm{I}$ and kilolitres ( k ) <br> Calculations and problem-solving <br> - Solve problems in contexts involving capacity/volume <br> - Convert between kilolitres, litres and millilitres to include fraction and decimal forms (to 2 decimal places) | DATA HANDLING <br> Collecting and organising data <br> Collect data <br> - Use tally marks and tables for recording <br> - Use simple questionnaires (yes/no type response) <br> - Order data from smallest group to largest group <br> Note: PROVIDE LEARNERS WITH DATA TO SAVE TIME <br> Representing data <br> - Draw a variety of graphs to display and interpret data including: <br> - Pictographs with many-to-one representations <br> - Bar graphs and double bar graphs <br> Analysing, interpreting and reporting data <br> - Critically read and interpret data represented in: <br> - Words <br> - Pictographs <br> - Bar graphs <br> - Double bar graphs <br> - Pie charts <br> - Analyse data by answering questions related to: <br> - Data categories, including data intervals <br> - Data sources and contexts <br> - Central tendencies - (mode and median) <br> - Summarise data verbally and in short written paragraphs that include <br> - Drawing conclusions about the data <br> - Making predictions based on the data | USE ALL FOUR BASIC OPERATIONS TO SOLVE PROBLEMS IN CONTEXT <br> Solving problems <br> - Solve problems in contexts involving whole numbers and fractions, including: <br> - Financial contexts <br> - Measurement contexts <br> - Fractions, including grouping and equal sharing <br> - Comparing two or more quantities of the same kind (ratio) <br> - Comparing two quantities of different kinds (rate) | REVISION | FORMAL ASSESSMENT TASK TEST <br> Term 3 \& 4 topics and fundamental topics of term 1 \& 2 |
| PREREQUISITE SKILL OR PREKNOWLEDGE | - Estimating, measuring, recording, comparing and ordering mass <br> - Use measuring instruments <br> - Units of mass <br> - Solve problems in contexts <br> - Conversions limited to whole numbers and common fractions | - Calculation of the number of days between any two dates within the same or consecutive years <br> - Calculation of time intervals where time is given in minutes or hours only | - Number sentences <br> - All operations with whole numbers, common fractions and decimal fractions |  |  |  |  |

