PRIMARY MATHS YEAR 5

	AUTUMN TERM	SPRING TERM	SUMMER TERM
Week 1	Number and Place Value: Numbers to 1 000 000 LESSON BREAKDOWN	Fractions, Decimals and Percentages: Fractions LESSON BREAKDOWN	Geometry – Position and Direction: Position and Movement LESSON BREAKDOWN
Week 2			Measurement: Measurements LESSON BREAKDOWN
Week 3			
Week 4	Calculations: Addition and Subtraction LESSON BREAKDOWN		
Week 5		Mid-year (A) Tests and Remediation	Measurement: Area and Perimeter LESSON BREAKDOWN
Week 6	Calculations: Multiplication and Division LESSON BREAKDOWN	Fractions, Decimals and Percentages: Decimals LESSON BREAKDOWN	
Week 7			
Week 8			Measurement: Volume LESSON BREAKDOWN
Week 9		Fractions, Decimals and Percentages: Percentage LESSON BREAKDOWN	
Week 10	Calculations: Word Problems LESSON BREAKDOWN	Geometry – Properties of Shapes: Geometry LESSON BREAKDOWN	Number and Place Value: Roman Numerals LESSON BREAKDOWN
Week 11	Statistics: Graphs LESSON BREAKDOWN		Review and Revision
Week 12			End-of-year (B) Tests and Remediation

AUTUMN TERM -		
Number and Place Value: Numbers to 1 000 000		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 1 – Numbers to 1 000 000	Lesson 1 – Reading and Writing Numbers to 100 000	To read and represent numbers to 100 000.
	Lesson 2 – Reading and Writing Numbers to 1 000 000	To read and represent numbers to 1 000 000.
	Lesson 3 – Reading and Writing Numbers to 1 000 000	To read and represent numbers to 1 000 000 using number discs.
	Lesson 4 – Comparing Numbers to 1 000 000	To compare numbers to 1 000 000 using place value.
	Lesson 5 – Comparing Numbers to 1 000 000	To compare numbers to 1 000 000 using place value.
	Lesson 6 – Comparing Numbers to 1 000 000	To compare numbers to 1 000 000 using pictorial representations and proportionality.
	Lesson 7 – Comparing Numbers to 1 000 000	To compare numbers to 1 000 000 from pictorial representations, using lists and number lines.
	Lesson 8 – Making Number Patterns	To make and identify patterns in numbers using knowledge of place value.
	Lesson 9 – Making Number Patterns	To make number patterns that decrease in multiples of 10 000 or 100 000.
	Lesson 10 – Rounding Numbers	To round numbers to the nearest 10 000 using number lines and bar graphs.
	Lesson 11 – Rounding Numbers	To round numbers to the nearest 100 000 using number lines and bar graphs.
	Lesson 12 – Rounding Numbers	To round numbers to the nearest 100, 1000, 10 000 and 100 000 using number lines.
	Chapter consolidation	To practise various concepts covered in the chapter.
	2 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

Calculations: Addition and Subtraction		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 2 – Whole Numbers: Addition and Subtraction	Lesson 1 – Counting On to Add	To add using the 'counting on' strategy with concrete materials and number lines.
	Lesson 2 – Counting Backwards to Subtract	To subtract using the 'counting backwards' strategy with concrete materials.
	Lesson 3 – Adding within 1 000 000	To add numbers within 1 000 000 using rounding and concrete materials.
	Lesson 4 – Adding and Subtracting within 1 000 000	To use addition and subtraction to solve comparison problems with numbers to 1 000 000.
	Lesson 5 – Adding within 1 000 000	To add numbers within 1 000 000 using the column method of addition.
	Lesson 6 – Subtracting within 1 000 000	To subtract using the column method, number bonds and number discs using numbers to 1 000 000.
	Lesson 7 – Adding and Subtracting within 1 000 000	To add and subtract using number bonds as a key strategy using numbers within 1 000 000.
	Lesson 8 – Adding within 1 000 000	To consolidate and refine addition skills and place-value knowledge to solve addition problems.
	Lesson 9 – Subtracting within 1 000 000	To subtract numbers to 1 000 000 using concrete materials, the column method and number bonds.
	Lesson 10, Part 1 – Subtracting within 1 000 000	To consolidate and refine subtraction skills and place-value knowledge to solve subtraction problems.
	Lesson 10, Part 2 – Subtracting within 1 000 000	To consolidate and refine subtraction skills and place-value knowledge to solve subtraction problems.
	Chapter consolidation	To practise various concepts covered in the chapter.

Calculations: Multiplication and Division		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 3 – Whole Numbers: Multiplication and Division	Lesson 1 – Finding Multiples	To consolidate and review multiplication; to find the result of multiplying by a number.
	Lesson 2 – Finding Factors	To consolidate and review multiplication; to find the numbers we can multiply by to get a number.
	Lesson 3 – Finding Common Factors	To define and find common factors of numbers to 100.
	Lesson 4 – Finding Prime Numbers	To identify and name the prime numbers; to recognise prime numbers as numbers that only have 2 factors.
	Lesson 5 – Finding Prime Numbers	To define and determine prime numbers to 100.
	Lesson 6 – Finding Square and Cube Numbers	To create and determine square and cubed numbers.
	Lesson 7 – Multiplying 10, 100 and 1000	To multiply 1- and 2-digit numbers by 10, 100 and 1000.
	Lesson 8 – Multiplying 2-Digit and 3-Digit Numbers by a Single Digit	To multiply 2- and 3-digit numbers by a 1-digit number using multiple strategies.
	Lesson 9 – Multiplying 4-Digit Numbers	To multiply 4-digit numbers by 1-digit numbers.
	Lesson 10 – Multiplying 4-Digit Numbers	To multiply 4-digit numbers by 1-digit numbers with regrouping, using a variety of strategies.
	Lesson 11 – Multiplying 4-Digit Numbers	To multiply a 4-digit number by a 1-digit number, with regrouping from the ones, tens and hundreds, using multiple methods.
	Lesson 12 – Multiplying a 2-Digit Number by a 2-Digit Number	To multiply 2-digit numbers by 2-digit numbers using multiple methods.
	Lesson 13 – Multiplying a 2-Digit Number by a 2-Digit Number	To multiply a 2-digit number by a 2-digit number using multiple methods, including the grid method, number bonds and column method, with regrouping.
	Lesson 14 – Multiplying a 3-Digit Number by a 2-Digit Number	To multiply a 3-digit number by a 2-digit number, with the grid method and column method as key strategies.

Calculations: Multiplication and Division (continued)		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 3 – Whole Numbers: Multiplication and Division	Lesson 15 – Multiplying a 3-Digit Number by a 2-Digit Number	To multiply a 3-digit number by a 2-digit number with regrouping, using the column method as the key strategy.
	Lesson 16 – Dividing by 10, 100 and 1000	To find thousands, hundreds and tens in a 4-digit number using concrete materials.
	Lesson 17 – Dividing 3-Digit and 4-Digit Numbers	To divide 3- and 4-digit numbers by 1-digit numbers, using number bonds and long division as the key methods.
	Lesson 18 – Dividing 4-Digit Numbers	To divide 4-digit numbers by 1-digit numbers, using number bonds and long division as the key methods.
	Lesson 19 – Dividing with Remainder	To divide 3-digit numbers by 1-digit numbers, using long division, short division and mental methods, that give rise to remainders.
	Chapter consolidation	To practise various concepts covered in the chapter.

Calculations: Word Problems		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 4 – Whole Numbers: Word Problems	Lesson 1 – Solving Word Problems	To solve word problems involving multiple operations; to identify the operation needed to carry out the plan.
	Lesson 2 – Solving Word Problems	To solve word problems involving multiplication and division using bar models as the main heuristic.
	Lesson 3 – Solving Word Problems	To solve word problems involving multiple operations, identifying key information and representing information using bar model diagrams.
	Lesson 4 – Solving Word Problems	To solve word problems involving multiple operations, using bar models as they key heuristic to represent key information.
	Chapter consolidation	To practise various concepts covered in the chapter.

Statistics: Graphs		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 5 – Graphs	Lesson 1 – Reading Tables	To read the information presented in a table and interpret its meaning.
	Lesson 2 – Reading Tables	To read and respond to information presented in a table.
	Lesson 3 – Reading Tables	To read and respond to tables that have a variety of data sets.
	Lesson 4 – Reading Line Graphs	To read and interpret information provided in a line graph where a single line represents the data.
	Lesson 5 – Reading Line Graphs	To read and interpret information presented on a line graph where the data is represented by more than one line.
	Lesson 6 – Reading Line Graphs	To read and interpret information presented on a line graph where the data is represented by more than one line.
	Lesson 7 – Reading Line Graphs	To read and interpret information presented in a table and turn it into a line graph; to determine relationships between data sets.
	Chapter consolidation	To practise various concepts covered in the chapter.
	2 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

SPRING TERM –		
Fractions, Decimals and Percentages: Fractions		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 6 – Fractions	Lesson 1 – Dividing to Make Fractions	To divide whole numbers to create fractions; to create mixed numbers and improper fractions when dividing whole numbers.
	Lesson 2 – Writing Improper Fractions and Mixed Numbers	To write improper fractions and mixed numbers using a number line and pictorial methods.
	Lesson 3 – Finding Equivalent Fractions	To find equivalent fractions using pictorial methods.
	Lesson 4 – Comparing and Ordering Fractions	To compare and order fractions using the pictorial method.
	Lesson 5 – Comparing and Ordering Fractions	To compare and order improper fractions using the pictorial method.
	Lesson 6 – Comparing and Ordering Fractions	To compare mixed numbers using pictorial representations; to find common denominators where one fraction is already the common denominator for all fractions in the question.
	Lesson 7 – Making Number Pairs	To make number pairs (number bonds) with fractions with different denominators.
	Lesson 8 – Adding Fractions	To add unlike fractions by finding a common denominator using pictorial methods.
	Lesson 9 – Adding Fractions	To add unlike fractions by finding a common denominator using pictorial methods.
	Lesson 10 – Adding Fractions	To add together unlike fractions where the sum is greater than 1, creating mixed numbers or improper fractions.
	Lesson 11 – Adding Fractions	To add unlike fractions which create improper fractions and mixed numbers that give rise to simplification.
	Lesson 12 – Subtracting Fractions	To subtract fractions with different denominators; to subtract fractions from whole numbers.
	Lesson 13 – Subtracting Fractions	To subtract fractions where the denominators are not the same; to use bar models as a key strategy for subtracting fractions.
	Lesson 14 – Subtracting Fractions	To subtract fractions and mixed numbers from mixed numbers with different denominators.
	Lesson 15 – Multiplying Fractions by Whole Numbers	To multiply fractions by whole numbers creating other fractions, mixed numbers or improper fractions.

Fractions, Decimals and Percentages: Fractions (continued)		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 6 – Fractions	Lesson 16 – Multiplying Fractions by Whole Numbers	To multiply fractions by whole numbers where the product is an improper fraction or mixed number.
	Lesson 17 – Multiplying Mixed Numbers	To multiply mixed numbers by whole numbers, creating larger mixed numbers.
	Lesson 18 – Multiplying Mixed Numbers by Whole Numbers	To multiply mixed numbers by whole numbers in multi-step word problems.
	Chapter consolidation	To practise various concepts covered in the chapter.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.
Week 5	**MID-YEAR (A) TESTS AND REMEDIATION**	

Fractions, Decimals and Percentages: Decimals		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 7 – Decimals	Lesson 1 – Writing Decimals	To write decimal numbers.
	Lesson 2 – Reading and Writing Decimals	To read and write decimals.
	Lesson 3 – Reading and Writing Decimals	To read and write decimals.
	Lesson 4 – Comparing Decimals	To compare tenths and hundredths written as decimals.
	Lesson 5 – Comparing Decimals	To order and compare decimals.
	Lesson 6 – Comparing Decimals	To compare and order decimals of amounts.
	Lesson 7 – Writing Fractions as Decimals	To write fractions as decimals.
	Lesson 8 – Adding and Subtracting Decimals	To add and subtract amounts in decimals.
	Lesson 9 – Adding and Subtracting Decimals	To add and subtract decimals; to add and subtract amounts in pounds and pence.
	Lesson 10 – Adding and Subtracting Decimals	To add and subtract amounts in pounds and pence.
	Lesson 11 – Adding and Subtracting Decimals	To add and subtract decimals; to add and subtract amounts in pounds and pence.
	Lesson 12 – Adding and Subtracting Decimals	To add and subtract decimals to find the smallest possible sum and difference.
	Lesson 13 – Adding and Subtracting Decimals	To add and subtract decimals; to find number pairs that add up to 1.
	Lesson 14 – Adding and Subtracting Decimals	To add and subtract the perimeter of an object using decimals.
	Lesson 15 – Rounding Decimals	To round decimals to the nearest whole number; to round numbers to nearest tenth.
	Chapter consolidation	To practise various concepts covered in the chapter.

Fractions, Decimals and Percentages: Percentage		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 8 – Percentage	Lesson 1 – Comparing Quantities	To compare quantities; to compare fractions, decimals and percentages; to convert fractions to decimals and percentages.
	Lesson 2 – Finding Percentages	To convert values of an amount into percentages; to convert fractions into percentages.
	Lesson 3 – Finding Percentages	To convert values of an amount into percentages; to convert fractions into percentages.
	Chapter consolidation	To practise various concepts covered in the chapter.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.
Geometry – Properties of Shapes: Geometry		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 9 – Geometry	Lesson 1 – Knowing Types of Angles	To know the names and qualities of acute, right, obtuse and reflex angles.
	Lesson 2 – Measuring Angles	To measure angles using a protractor.
	Lesson 3 – Measuring Angles	To draw, measure and add angles using a protractor.
	Lesson 4 – Investigating Angles on a Line	To measure angles using a protractor; to identify two angles which add up to 180 degrees on a straight line.
	Lesson 5 – Investigating Angles at a Point	To investigate angles that, when combined, make 360 degrees.
	Lesson 6 – Drawing Angles	To draw angles using a protractor.
	Lesson 7 – Drawing Lines and Angles	To draw lines and angles with a high level of accuracy.
	Lesson 8 – Describing Squares and Rectangles	To describe the sides and angles of both rectangles and squares.
	Lesson 9 – Investigating Angles in Squares and Rectangles	To investigate the angles of various quadrilaterals, including squares and rectangles.
	Lesson 10 – Solving Problems Involving Angles in Rectangles	To solve problems involving angles in rectangles.
	Lesson 11 – Solving Problems Involving Angles	To solve problems involving angles.
	Lesson 12 – Solving Problems Involving Angles	To use our understanding of angles to solve problems.
	Lesson 13 – Investigating Regular Polygons	To investigate regular polygons.
	Chapter consolidation	To practise various concepts covered in the chapter.
	1 consolidation day	To be used if lessons take longer than expected or a topic needs to be revisited.

Geometry – Position and Direction: Position and Movement		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 10 – Position and Movement	Lesson 1 – Naming and Plotting Points	To name and plot points.
	Lesson 2 – Describing Translations	To describe the position of a shape following a translation.
	Lesson 3 – Describing Movements	To describe movements and reflecting shapes.
	Lesson 4 – Describing Movements	To describe the movement of a 2-D shape when reflected.
	Lesson 5 – Successive Reflections	To reflect a shape more than once.
	Chapter consolidation	To practise various concepts covered in the chapter.

SUMMER TERM –		
Measurement: Measurements		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 11 – Measurements	Lesson 1 – Converting Units of Length	To convert units of length.
	Lesson 2 – Converting Units of Length	To convert units of length, including centimetres and metres.
	Lesson 3 – Converting Units of Length	To convert units of length.
	Lesson 4 – Converting Units of Length	To solve problems by converting units of length.
	Lesson 5 – Converting Units of Mass	To convert units of mass.
	Lesson 6 – Converting Units of Mass	To convert units of mass, including grams into kilograms.
	Lesson 7 – Converting Units of Mass	To convert units of mass.
	Lesson 8 – Converting Units of Mass	To convert units of mass, including kilograms and pounds.
	Lesson 9 – Converting Units of Time	To convert units of time.
	Lesson 10 – Converting Units of Time	To convert units of time from days into weeks and months.
	Lesson 11 – Converting Units of Time	To convert units of time.
	Lesson 12 – Converting Units of Time	To solve problems by converting units of time.
	Lesson 13 – Converting Units of Time	To convert units of time.
	Lesson 14 – Telling the Temperature	To read the temperature on a thermometer.
	Chapter consolidation	To practise various concepts covered in the chapter.

Measurement: Area and Perimeter		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 12 – Area and Perimeter	Lesson 1 – Finding the Perimeter	To find the perimeter of shapes.
	Lesson 2 – Finding the Perimeter	To find shapes with a specific perimeter.
	Lesson 3 – Finding the Perimeter	To find the perimeter of different shapes.
	Lesson 4 – Using Scale Diagrams to Find the Perimeter	To use scale diagrams to find the perimeter of a shape.
	Lesson 5 – Measuring the Area	To measure the area of shapes by counting squares.
	Lesson 6 – Measuring the Area	To measure the area of squares.
	Lesson 7 – Measuring the Area	To measure the area of a shape.
	Lesson 8 – Measuring the Area	To measure area in square metres.
	Lesson 9 – Measuring the Area	To measure area in square metres.
	Lesson 10 – Measuring the Area	To find the area of shapes in square metres.
	Lesson 11 – Estimating the Area	To make an estimation of area in kilometres.
	Chapter consolidation	To practise various concepts covered in the chapter.
	3 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.

Measurement: Volume		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 13 – Volume	Lesson 1 – Understanding the Volume of Solids	To understand the volume of solids.
	Lesson 2 – Finding the Volume of Solids	To find the volume of 3-D shapes.
	Lesson 3 – Finding the Volume of Solids	To find the volume of solids.
	Lesson 4 – Finding the Capacity of Rectangular Boxes	To find the capacity of a cuboid.
	Lesson 5 – Finding the Capacity of Rectangular Boxes	To find the capacity of rectangular boxes.
	Lesson 6 – Converting Units of Volume	To compare and convert units of volume.
	Lesson 7 – Converting Units of Volume	To convert units of volume (metric and imperial).
	Lesson 8 – Converting Units of Volume	To convert units of volume (metric and imperial).
	Lesson 9 – Solving Word Problems Involving Volume	To solve word problems involving volume.
	Lesson 10 – Solving Word Problems Involving Volume	To solve word problems involving volume.
	Chapter consolidation	To practise various concepts covered in the chapter.
Number and Place Value: Roman Numerals		
Maths — No Problem! Book Reference	**Lesson Name**	**Lesson Objective**
Chapter 14 – Roman Numerals	Lesson 1 – Writing Roman Numerals to 1000	To write Roman numerals to 1000.
	Lesson 2 – Writing Years in Roman Numerals	To write numbers in their thousands in Roman numerals.
	Chapter consolidation	To practise various concepts covered in the chapter.
	2 consolidation days	To be used if lessons take longer than expected or a topic needs to be revisited.
Week 11	**REVIEW AND REVISION**	
Week 12	**END-OF-YEAR (B) TESTS AND REMEDIATION**	