Admiralty Primary School
Primary 5 Mathematics
Lesson Focus

Whole Numbers to 10 millions **Pupils will learn how to recognise and write numbers up to 10 million.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Place values	• Count in 100 thousands up to 1 million • Rename 10 hundred thousands or 1000 thousands as 1 million • Read and write numbers within 10 million in numerals and in words • Recognise number notation and the respective place value of each digit • Find the whole given another part within 10 million • Find the missing part given the whole and the part within 10 million	• Rename, place value • Estimate
Four Operations of Whole Numbers **Pupils will learn how to multiply and divide whole numbers by 10, 100 and 1000 and perform operations based on a certain order.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Order in which arithmetic operations are carried out	• Multiply and divide a whole number by 10, 100 and 1000 • Multiply and divide a whole number by tens, hundreds and thousands • Perform mixed operations involving addition and subtraction without brackets • Perform mixed operations involving multiplication and division without brackets • Perform a mix of the 4 operations with and without brackets	• Multiply, divide, product, quotient • Order of operation • Estimate

Fractions and Division Pupils will learn about division of whole numbers as fractions, conversions of fractions to decimals and vice versa.		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Division of whole numbers as a reverse process is similar to finding a fraction of a set • Fractions can be converted to decimals and vice versa	• Divide a whole number by a whole number and represent the answer as a fraction • Convert fractions to decimals	• Proper fractions, improper fractions, mixed numbers • Convert
Operations of Fractions Pupils will learn to work on arithmetic operations involving fractions.		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Fractions may be added or subtracted when they have the same denominators • Multiplying proper fractions results in a fraction smaller than its multiplicands • Multiplying improper fractions may result in a fraction equal to or greater than one of its multiplicands • Multiplying mixed numbers result in a fraction greater than its multiplicands	• Add and subtract proper fractions / mixed numbers • Find the fraction of a set and a remainder • Multiply a proper fraction / an improper fraction by a whole number • Multiply a proper fraction / an improper fraction by a proper fraction / an improper fraction • Multiply a mixed number by a whole number	• Proper fractions, improper fractions, mixed numbers • Convert • Fraction of a remainder

Area of Triangles **Pupils will learn to associate the base and height of a triangle with finding the area of triangles.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Area of a triangle is half the area of a rectangle	• Identify the base and height of a triangle • Find the area of a triangle • Relate how the height and base of a triangle affects the area of the triangle • Find the areas of composite figures involving squares, rectangles and triangles	• Base, height, perpendicular distance, triangle, related rectangle • Area, composite figures
Volume **Pupils will learn to find the volumes of cubes and cuboids.** **Pupils will learn to find the volumes of liquid in cubes and cuboids.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Volume is the amount of space and object occupies • Volume is measured in cubic unit (non-standard unit) • Volume is measured in m^3, cm^3, ℓ and ml (standard unit) • Volume of a cuboid/cube can be found based on multiplying its three sides (length, breadth and height)	• Find the volume of the solids in cubic units • Draw cubes and cuboids on isometric grids • Draw different views of solids on square grids • State the volume of solid figures in cm^3 and m^3 • Find the volume of cubes and cuboids • Find the volume of water in rectangular containers	• Volume, cube, cuboid, unit cube, solid figure • Capacity • Cubic unit, cubic metre (m^3), cubic centimetre (cm^3), litre (ℓ) and millilitre (ml)

Decimals **Pupils will learn multiply and divide decimals, convert measurements in decimal form and solve problems involving 4 operations.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Addition, subtraction, multiplication and division of decimals	• Multiply and divide a decimal by 10, 100 and 1000 • Multiply and divide a decimal by tens, hundreds and thousands • Convert measurements of length, mass and volume in decimals from a larger unit to a smaller unit and vice versa • Convert measurements in compound units to decimals and vice versa	• Decimals • Fractions, numerator, denominator • Place values, tenths, hundredths, thousandths • Convert
Rate **Pupils will learn about rates and employ proportional reasoning to solve problems on rates.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• A rate compares two different quantities that have two different units of measurements • The idea of proportion is used to solve rate-related problems	• Express rate as one quantity per unit of another quantity • Find the total amount given the rate (or step-rate) and another quantity • Find the number of units given the rate and another quantity • Identify the rate, total amount or the number of units from given examples	• Rate, step-rate, unit rate • Per • Unitary method, proportion

Percentage Pupils will learn about percentage and its use in GST, discounts and interest rates.		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• A percentage is a ratio that compares a quantity against 100 • Fractions and decimals can be expressed as percentages and vice versa	• Express a fraction / decimal as a percentage • Express a fraction / decimal as a percentage by finding its equivalence with denominator 100 • Express a fraction / decimal as a percentage by multiplying by 100% • Express a percentage as a decimal / fraction in its simplest form • Find the quantity given a percentage part and the whole • Find the percentage part of a quantity given a part of a whole and the whole • Calculate the GST or percentage discounts based on a given amount • Calculate the interest given by banks for a sum of money deposited for a year	• Percentage • Part, whole • Unitary method • GST, discount, interest rate
Angles **Pupils will learn about different properties of angles and how to find unknown angles by applying the properties learned.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Sum of angles on a straight line is 180° • Vertically opposite angles are equal • Sum of angles at a point is 360°	• State that the sum of angles on a straight line is 180° • State that vertically opposite angles are equal • Identify the vertically opposite angle given a marked angle • State that the sum of angles at a point is 360° • Find unknown angles using various properties of angles	• Angles on a straight line • Vertically opposite angles • Angles at a point

Properties of Triangles **Pupils will learn about the different types of triangles and the properties of each type of triangles.** **Pupils will learn how to draw triangles and find unknown angles in triangles.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• A triangle has 3 sides and 3 vertices • Triangles are classified by their angles and side lengths • Sum of angles in a triangle is 180°	• State the properties of an equilateral triangle, an isosceles triangle and a right-angled triangle • State the properties of an acute-angled triangle and obtuse-angled triangle. • Recognise and name a type of triangle by its properties and attributes • Draw triangles given some measurements • State that the sum of angles in a triangle is 180° • Find unknown angles of a triangle	• Equilateral triangle, isosceles triangle, right-angled triangle • Acute-angled triangle, obtuse-angled triangle
Parallelogram, Rhombus and Trapezium **Pupils will learn about the properties of the parallelogram, rhombus and trapezium.** **Pupils will learn how to draw these 4-sided figures and find unknown marked angles in these figures.**		
Key Concepts	**Learning Objectives**	**Maths Vocabulary**
• Properties related to a parallelogram, a rhombus and a trapezium	• State the properties of a parallelogram, a rhombus and a trapezium • Recognise and name 4-sided figures by its properties and attributes • Draw parallelograms, rhombuses and trapeziums given some measurements • Find unknown angles of a 4-sided figure	• Parallelogram, rhombus, trapezium • 4-sided figures, quadrilaterals • Properties, angles