

Admiralty Primary School
Primary 3 Mathematics
Lesson Focus

Semester 1

Numbers to 10 000 – Pupils will learn how to recognise, count, write and compare numbers up to 10 000.		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • Understand how our number system works using thousands, hundreds, tens and ones. • Know that the value of a digit depends on its place (for example, the “5” in 5,432 is different from the “5” in 3,504). • Break apart and put together numbers in different ways. • Recognise patterns in number sequences. • Identify even and odd numbers. 	<ul style="list-style-type: none"> • Count in hundreds/thousands • Read and write numbers in numerals and in words • Recognise number notation and the respective value and place value of each digit • Relate how big numbers are used in real life • Compare and order numbers within 10 000 • Identify patterns in number sequences 	<ul style="list-style-type: none"> • Digit • Value • Stands for • Thousands, hundreds, tens, ones • compare, greater than, smaller than, greatest, smallest • increasing order, decreasing order • even, odd

Addition and Subtraction Numbers Within 10 000 – Pupils will learn to add and subtract numbers within 10 000.

Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none">• Parts are added to make up a whole• A whole is the sum of different parts• Comparing numbers results in one number being more or less than the other number by a certain value	<ul style="list-style-type: none">• Add up and subtract up to 4-digit numbers with and without renaming• use a variety of mental strategies (number bond, making tens, breaking down numbers, using patterns etc) for mental calculation involving addition and subtraction of two 2-digit numbers• Draw part-whole or comparison models to illustrate concept of addition and subtraction when solving word problems• Add and subtract 2-digit numbers mentally	<ul style="list-style-type: none">• Sum and difference• Addition (with and without renaming)• Subtraction (with and without renaming)• Part-whole model• Comparison model

Money – Pupils will learn how to add and subtract money in decimal notation.		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • Money is used as a measure of value or worth • Money is used exchange for something that is worth the monetary amount • Understand the relationship between dollars and cents (100 cents = 1 dollar). • Solve real-life money problems such as finding change. • Estimate whether their answers are reasonable. 	<ul style="list-style-type: none"> • Add and subtract money in whole numbers and in decimal notation • Real-life math application of addition and subtraction in money 	<ul style="list-style-type: none"> • Prices, cost, value • Amount of change, amount left, amount spent • Dollars, cents • More expensive, cheaper
Multiplication Tables of 6, 7, 8 and 9 – Pupils will learn how to skip-count, multiply and divide numbers within the multiplication tables of 6, 7, 8 and 9.		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • Multiplication is conceptualised from repeated addition of equal-sized groups of objects • Division is conceptualised as equal sharing or equal-sized grouping of objects 	<ul style="list-style-type: none"> • Relate multiplication concept as equal-sized groups of 6, 7, 8 and 9 • Relate division concept as equal-sized groups of 6, 7, 8 and 9 objects • Compute the multiplication and division facts of 6, 7, 8 and 9 mentally 	<ul style="list-style-type: none"> • Multiplication (with and without renaming) • Division (with and without renaming) • Groups • As many as • ___ times as many (eg. Twice is two times as many) • twice
Multiplication and Division – Pupils will learn how to multiply and divide.		
Key Concepts	Learning Objectives	Math Vocabulary

<ul style="list-style-type: none">• Multiplication is conceptualised as an equal-sized grouping of objects multiplied a number of times• Division is conceptualised as equal sharing or equal-sized grouping of objects	<ul style="list-style-type: none">• Multiply a 2-digit or 3-digit number by a 1-digit number with and without renaming• Divide a 2-digit or 3-digit number by a 1-digit number without or with renaming (with or without a remainder)• Solve word problems involving the four operations	<ul style="list-style-type: none">• Multiplication (with and without renaming)• Division (with and without renaming)• Each• Equal• Product
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More Problem Sums I and II		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • Application of 4-operations like addition, subtraction, multiplication, and division in problem sums. 	<ul style="list-style-type: none"> • Identify and understand the use of different types of model drawings, including part-whole models and comparison models. • Apply problem-solving strategies and heuristics such as guess-and-check, pattern recognition, and working backwards to solve mathematical problems effectively. 	<ul style="list-style-type: none"> • Part-whole • Comparison • Sum, Difference • Total
Bar Graphs – Pupils will learn to organize information using bar graphs and interpret information from the graphs.		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • Data can be organized and presented for interpretation using bar graphs • Bar graphs are used for comparison of data across categories 	<ul style="list-style-type: none"> • Read and interpret information from bar graphs. • Understand different scales used on graphs. • Compare quantities using data from graphs. • Draw simple conclusions from data presented. 	<ul style="list-style-type: none"> • symbol • Data • Scale • Represent • Category • Vertical and horizontal bar graphs • Composite bar graph
Angles – Pupils will learn the concept of angles and how to compare angles.		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • An angle is the measure of the amount of turning made between two straight lines about a point 	<ul style="list-style-type: none"> • Identify if an angle is a right angle, an acute angle, or an obtuse angle • Identify angles greater than or smaller than a right angle 	<ul style="list-style-type: none"> • Right angle • Acute angle • Obtuse angle • Size of an angle

Perpendicular and Parallel Lines – Pupils will learn about different pairs of lines and how to construct those lines.

Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • Perpendicular lines are lines that are at right angles to each other • Parallel lines do not meet and the distance between them is always the same 	<ul style="list-style-type: none"> • Identify and name a pair of perpendicular lines and parallel lines using the symbol “\perp” and “//” respectively • Draw perpendicular lines and parallel lines on a square grid • Use a set square and a ruler to construct perpendicular lines and parallel lines 	<ul style="list-style-type: none"> • Vertical, horizontal • Right angle • Perpendicular line • Parallel line

Fractions – Pupils will learn to recognise parts of a whole in their equivalent forms.

Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> • A fraction is seen as the relationship between one or more equal parts of a whole • Equivalent fractions are fractions of equal sizes • Fractions of different sizes can be compared when they have a common ‘base’ 	<ul style="list-style-type: none"> • Divide a given fraction into smaller equal parts to get an equivalent fraction • Find equivalent fractions through multiplying the numerator and denominator by the same number • Express a fraction in its simplest form • Compare and order fractions • Add and subtract fractions 	<ul style="list-style-type: none"> • Equal parts • Fractions (like fractions, unlike fractions, equivalent fractions) • Numerator and denominator • Part-whole • Simplest form • Equivalent

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Semester 2

Length, Mass and Volume – Pupils will learn how to develop a sense of measurement with respect to attributes of length, mass and volume (of liquid).		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> Assign a numerical value to an attribute (length, mass or volume) of an object to show the size or amount of the object Standard units are used as measurement of the attributes of an object 	<ul style="list-style-type: none"> Estimate and measure length in centimetres, metres and kilometres Estimate and measure mass in grams and kilograms Measure volume of liquid in millilitres and litres Convert between units of measurement for length, mass and volume <ul style="list-style-type: none"> kilometres (km) and metres (m) metres (m) and centimetres (cm) kilograms (kg) and grams (g) litres (ℓ) and millilitres (ml) 	<ul style="list-style-type: none"> Height, distance, length centimetres, metres and kilometres Mass, Heavier, lighter, heaviest, lightest grams, kilograms Volume and capacity millilitres, litres
Area and Perimeter – Pupils will learn how to define perimeter and area, and how to use the formula for calculating them.		
Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none"> Perimeter is the distance around a closed figure Area is the amount of space taken up by the closed figure 	<ul style="list-style-type: none"> Find the perimeter and area of a closed figure Measure area in square units (units²), square centimetres (cm²) and square metres (m²) Compare the perimeters and areas of different figures 	<ul style="list-style-type: none"> Space Area Length, Breadth Perimeter Square units (units²), square centimetres (cm²) and square metres (m²)

Time – Pupils will learn how to tell times of the day and solve problems involving durations, starting time and finishing time.

Key Concepts	Learning Objectives	Math Vocabulary
<ul style="list-style-type: none">• Time is a form of measurement to describe the sequence of events and how long they take	<ul style="list-style-type: none">• Measure time in seconds• Read and write time in the 12-hour and 24-hour clock• Find the starting time, finishing time or duration involving the 24-hour clock	<ul style="list-style-type: none">• Time• Seconds• 12-hour clock, 24-hour clock• Starting time, finishing time• Arrival time, departure time• Duration