**Admiralty Primary School**

**2023 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.** | | |
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| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Counting relates to finding how many<br>• Manipulatives with tens as the base are used to model numbers<br>• The relative value of a number can be known through comparing it with other | • Recognise number notation and the respective value and place value of each digit<br>• Relate how big numbers are used in real life<br>• Compare and order numbers within 10 000<br>• Identify patterns in number sequences | • Digit<br>• Place value |
| **Addition and Subtraction Numbers Within 10 000 – Pupils will learn to add and subtract numbers within 10 000.** | | |
| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Parts are added to make up a whole<br>• A whole is the sum of different parts<br>• Comparing numbers results in one number being more or less than the other number by a certain value | • Add up and subtract up to 4-digit numbers with and without regrouping<br>• Draw part-whole or comparison models to illustrate concept of addition and subtraction when solving word problems<br>• Add and subtract 2-digit numbers mentally | • Addition (with and without regrouping)<br>• Subtraction (with and without regrouping)<br>• Part-whole model<br>• Comparison model |

| **Money – Pupils will learn how to add and subtract money in decimal notation.** | | |
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| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Money is used as a measure of value or worth<br>• Money is used exchange for something that is worth the monetary amount | • Add and subtract money in whole numbers and in decimal notation<br>• Real-life math application of addition and subtraction in money | • Dollars, cents |
| **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** |
| • Multiplication is conceptualised from repeated addition of equal-sized groups of objects<br>• Division is conceptualised as equal sharing or equal-sized grouping of objects | • Relate multiplication concept as equal-sized groups of 6, 7, 8 and 9<br>• Relate division concept as equal-sized groups of 6, 7, 8 and 9 objects<br>• Compute the multiplication and division facts of 6, 7, 8 and 9 mentally | • Multiplication (with and without regrouping)<br>• Division (with and without regrouping) |
| **Multiplication and Division – Pupils will learn how to multiply and divide.** | | |
| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Multiplication is conceptualised as an equal-sized grouping of objects multiplied a number of times<br>• Division is conceptualised as equal sharing or equal-sized grouping of objects | • Multiply a 2-digit or 3-digit number by a 1-digit number with and without regrouping<br>• Divide a 2-digit or 3-digit number by a 1-digit number without or with regrouping (with or without a remainder)<br>• Solve word problems involving the four operations | • Multiplication (with and without regrouping)<br>• Division (with and without regrouping) |

| **More Problem Sums I and II** | | |
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| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Application of 4-operations like addition, subtraction, multiplication, and division in problem sums. | • Understanding the different types of model drawing (part-whole model and comparison model)<br>• Applying the problem-solving strategies and heuristics strategies like guess and check, recognizing patterns and working backwards | • Part-whole<br>• Comparison<br>• Difference<br>• Total |
| **Bar Graphs – Pupils will learn to organize information using bar graphs and interpret information from the graphs.** | | |
| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Data can be organized and presented for interpretation using bar graphs | • Read and interpret data from bar graphs | • Data<br>• Vertical and horizontal bar graphs<br>• Scale |
| **Angles – Pupils will learn the concept of angles and how to compare angles.** | | |
| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • An angle is the measure of the amount of turning made between two straight lines about a point | • Identify if an angle is a right angle, an acute angle, or an obtuse angle<br>• Identify angles greater than or smaller than a right angle | • Right angle<br>• Acute angle<br>• Obtuse angle |

| **Perpendicular and Parallel Lines – Pupils will learn about different pairs of lines and how to construct those lines.** | | |
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| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Perpendicular lines are lines that are at right angles to each other<br>• Parallel lines do not meet and the distance between them is always the same | • Identify and draw perpendicular lines and parallel lines<br>• Name a pair of perpendicular lines and parallel lines using the symbol "⊥" and "//" respectively | • Perpendicular line<br>• Parallel line |
| **Fractions – Pupils will learn to recognise parts of a whole in their equivalent forms.** | | |
| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • A fraction is seen as the relationship between one or more equal parts of a whole<br>• Equivalent fractions are fractions of equal sizes<br>• Fractions of different sizes can be compared when they have a common 'base' | • Divide a given fraction into smaller equal parts to get an equivalent fraction<br>• Find equivalent fractions through multiplying the numerator and denominator by the same number<br>• Express a fraction in its simplest form<br>• Compare and order fractions<br>• Add and subtract fractions | • Fractions (like fractions, unlike fractions, equivalent fractions)<br>• Numerator and denominator<br>• Part-whole<br>• Simplest form |

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**Lesson Focus**

## 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).** | | |
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| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Assign a numerical value to an attribute (length, mass or volume) of an object to show the size or amount of the object<br>• Standard units are used as measurement of the attributes of an object | • Estimate and measure length in centimetres, metres and kilometres<br>• Estimate and measure mass in grams and kilograms<br>• Measure volume of liquid in millilitres and litres<br>• Convert between units of measurement for length, mass and volume | • Length (centimetres, metres and kilometres)<br>• Mass (grams, kilograms)<br>• Volume and capacity (millilitres, litres) |
| **Perimeter and Area – Pupils will learn how to define perimeter and area, and how to use the formula for calculating them.** | | |
| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Perimeter is the distance around a closed figure<br>• Area is the amount of space taken up by the closed figure | • Find the perimeter and area of a closed figure<br>• Measure area in square units (units$^2$), square centimetres (cm$^2$) and square metres (m$^2$)<br>• Compare the perimeters and areas of different figures | • Area<br>• Perimeter<br>• Square units (units$^2$), square centimetres (cm$^2$) and square metres (m$^2$) |

| **Time – Pupils will learn how to tell times of the day and solve problems involving durations, starting time and finishing time.** | | |
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| **Key Concepts** | **Learning Objectives** | **Math Vocabulary** |
| • Time is a form of measurement | • Measure time in seconds<br>• Read and write time in the 12-hour and 24-hour clock<br>• Find the starting time, finishing time or duration involving the 24-hour clock | • Time<br>• Seconds<br>• 12-hour clock, 24-hour clock<br>• Starting time, finishing time<br>• Duration |