

## Year 4 Term 1

\*\* in addition to this arithmetic will be 15 mins daily

### Number - number and place value

- count in multiples of 25 and 1000
- find 1000 more or less than a given number
- count backwards through zero to include negative numbers
- recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- order and compare numbers beyond 1000
- identify, represent and estimate numbers using different representations
- round any number to the nearest 10, 100 or 1000

### Taught outside of main focus lessons

- solve number and practical problems that involve all of the above and with increasingly large positive numbers
- read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
  - count in multiples of 6, 7, 9

### Number - addition and subtraction

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

Moonwalk Maths (15 mins recap 1:00-1:15pm)	Shape 2d and 3d draw 2-D shapes and make 3-D shapes using modelling materials, recognise 3-D shapes in different orientations and describe them (Y3)	Measure measure, compare, add and subtract: lengths (m/cm/mm) mass (kg/g); volume/capacity (l/ml) measure the perimeter of simple 2-D shapes (Y3)	Measure measure, compare, add and subtract: measure the perimeter of simple 2-D shapes (Y3)	Data interpret and present data using bar charts, pictograms and tables (Y3)	Time tell and write the time from an analogue clock (Y3)	Time estimate and read time with increasing accuracy to the nearest minute (Y3)
Counting stick (Start of main lesson)	Recap 3s	Recap 4s	Recap 8s	12s	12s	12s
Main focus	<u>Place Value</u> Recognise value of 4 digit number, find 1000 more/less,	<u>Place Value</u> Count in multiples of 25 and 1000, order and compare beyond 1000,	<u>Place Value</u> Interpret up on a number line, Count backwards through zero, negative numbers	<u>Addition and Subtraction</u>	<u>Addition and Subtraction</u>	<u>Addition and Subtraction</u> Including mixed operations two-step problems
Assessment points						

## Term 2

### Number - multiplication and division

- recall multiplication and division facts for multiplication tables up to  $12 \times 12$
- use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- recognise and use factor pairs and commutativity in mental calculations
- multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and **harder correspondence problems such as n objects are connected to m objects.**

### Geometry - Properties of Shape

- compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- identify acute and obtuse angles and compare and order angles up to two right angles by size
- identify lines of symmetry in 2-D shapes presented in different orientations
- complete a simple symmetric figure with respect to a specific line of symmetry.

Mental oral starter Moonwalk maths	<b>Money</b> add and subtract amounts of money to give change, using both £ and p in practical contexts (Y3)	<b>Fractions</b> recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators (Y3)	<b>Fractions</b> add and subtract fractions with the same denominator within one whole (Y3)	Assessment	<b>Place value</b> recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (Y4)	<b>Place value</b> count in multiples of 25 and 1000, find 1000 more or less than a given number (Y4)	<b>Place value</b> order and compare numbers beyond 1000 (Y4)
Counting stick	6s	6s	6s		6s	6s	6s
Main focus	<b><u>Multiplication and division</u></b> Facts for 6/7/9/11/12	<b><u>Multiplication and division</u></b> Facts for 6/7/9/11/12, including factor pairs and commutativity	<b><u>Multiplication and division</u></b> Formal methods and multiplying and dividing by 0 and 1		<b><u>Properties of shape</u></b> Symmetry	<b><u>Properties of shape</u></b> Compare and classify shapes	<b><u>Properties of shape</u></b> Compare and classify shapes  <b><u>AFL</u></b>
Assessment points							

### Term 3

#### Measurement - Time

- read, write and convert time between analogue and digital 12- and 24-hour clocks
- solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

#### Fractions

- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- recognise and write decimal equivalents of any number of tenths or hundredths
- recognise and write decimal equivalents to quarter, half and 3 quarter
- find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- round decimals with one decimal place to the nearest whole number
- compare numbers with the same number of decimal places up to two decimal places

Mental oral starter Moonwalk maths	Measure measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (Y3)	Calculation problems Addition and subtraction word problems	Data interpret and present data using bar charts, pictograms and tables (Y3)	Money add and subtract amounts of money to give change, using both £ and p in practical contexts (Y3)	Time 12-24hour clock (Y4)	Calculation problems Multiplication and division word problems
Counting stick	9s	9s	9s	9s	9s	9s
Main focus	<u>Time</u> 12-24hour clock	<u>Time</u> Convert hour/mins, min/seconds etc.	<u>Fractions</u> <u>including</u> <u>decimals</u> Tenths and hundredths	<u>Fractions</u> <u>including</u> <u>decimals</u> Dividing by 10 and 100, decimal equivalents	<u>Fractions</u> <u>including</u> <u>decimals</u> Rounding, Compare numbers with decimal places	<u>AFL</u>  <u>Gecko Maths</u>
Assessment points						

Term 4

**Measurement**

- Convert between different units of measure [for example, kilometre to metre; hour to minute]
- measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- find the area of rectilinear shapes by counting squares
- estimate, compare and calculate different measures, including money in pounds and pence

**Mathematical Movement**

- describe positions on a 2-D grid as coordinates in the first quadrant
- describe movements between positions as translations of a given unit to the left/right and up/down
- plot specified points and draw sides to complete a given polygon

**Geometry - Properties of Shape**

- compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- identify acute and obtuse angles and compare and order angles up to two right angles by size
- identify lines of symmetry in 2-D shapes presented in different orientations
- complete a simple symmetric figure with respect to a specific line of symmetry.

Mental oral starter Moonwalk maths	Calculation problems Addition and subtraction	Fractions Tenths and hundredths	Fractions Dividing by 10 and 100, decimal equivalents	Assessment week	Place value count backwards through zero to include negative numbers	Place Value round any number to the nearest 10, 100 or 1000	Calculation problems Multiplication and division
Counting stick/non negotiable	7s	7s	7s		7s	7s	7s
Main focus	<u>Measurement</u> Convert between units of measures	<u>Measurement</u> Perimeter and area	<u>AFL</u>  <u>Gecko Maths</u>		<u>Geometry</u> Angles	<u>Mathematical Movement</u> Coordinates	<u>Mathematical Movement</u> Translations
Assessment points							

**Fractions**

- recognise and show, using diagrams, families of common equivalent fractions
- add and subtract fractions with the same denominator
- solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
- solve simple measure and money problems involving fractions and decimals to two decimal places.

**Data:**

- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- solve comparison, sum and difference problem

Mental oral starter Moonwalk maths	Shape Symmetry, classify and name shapes	Place value Roman Numerals	Measure Perimeter and area	Calculation problems + -	Calculation problems X /	AFL
Counting stick	12s	12s	12s	12s	12s	12s
Main focus	<u>Fractions</u> Fraction families, common equivalents	<u>Fractions</u> Add and subtract	<u>Fractions</u> Calculate fractions of amounts (unit and non unit)	<u>Data</u>	<u>Data</u>	<u>AFL</u>  <u>Gecko Maths</u>
Assessment points						

**Place Value: Checking, approximating and estimating**

- Approximate any number by rounding to the nearest 10, 100 or 1000
- Approximate any number with one decimal place by rounding to the nearest whole number
- Understand checking as the process of working backwards from the answer to ensure that it makes sense
- Understand estimating as the process of finding a rough value of an answer or calculation

**Number - multiplication and division**

- recall multiplication and division facts for multiplication tables up to  $12 \times 12$
- use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- recognise and use factor pairs and commutativity in mental calculations
- multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and **harder correspondence problems such as n objects are connected to m objects.**

Mental oral starter Moonwalk maths	Time Converting and problems	Shape Angles	Data Interpret data including bar charts and time graphs	Assessment	Money Money problems	Place value Rounding	AFL
Counting stick	11s	11s	11s		11s	11s	11s
Main focus	<u>Place Value</u> Checking, approximating and estimating	<u>AFL</u> <u>Mixed multi step word problems</u>	<u>AFL</u> <u>Gecko Maths</u>		<u>Multiplication</u> <u>Recap</u> Formal methods	<u>Division</u> Formal methods	<u>AFL</u> <u>Gecko Maths</u>
Assessment points							