Year 4 Maths

Autumn 1

Topic: Place Value (3 weeks)
Objectives:
- Count in multiples of 6, 7, 9, 25 and 100
- 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
- Round any number to the nearest 10, 100 or 1000

Topic: Addition and Subtraction (3 weeks)
Objectives:
- Add and subtract numbers with up to 4 digits using 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

Topic: Money (1 week)
Objectives:
- Estimate, compare and calculate different measures, including money in £ and p
- Convert between £ and p
- Write money as decimals
- Solve problems involving money

Autumn 2

Topic: Shape (2 weeks)
Objectives:
- 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

Topic: Multiplication & Division (2 weeks)
Objectives:
- Recall multiplication and division facts for multiplication tables up to 12 x 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

Topic: Measurement of time (3 week)
Objectives:
- Read, write and convert time between analogue and digital 12 and 24 hour clocks
- Solve problems involving converting from hrs to min, min to secs, years to months, weeks to days

Spring 1

Topic: Place Value (2 weeks)
Objectives:
- Count backwards through zero to include negative numbers
- Identify, represent and estimate numbers using different representations
- 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

Topic: Statistics (1 week)
Objectives:
- Interpret and present discrete and continuous data using appropriate graphical methods including bar charts and time graphs
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Topic: Position & direction (2 week)
Objectives:
- 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

Spring 2

Topic: Multiplication & Division (3 weeks)
Objectives:
- 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

Topic: Fractions (3 weeks)
Objectives:
- Recognise and show, using diagrams, families of common equivalent fractions
- Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten
- 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
- Add and subtract fractions with the same denominator
- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
- 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

Summer 1

Topic: Decimals
Objectives:
- Recognise and show, using diagrams, families of common equivalent fractions
- Round decimals with one decimal place to the nearest whole number
- Tenths as fractions and decimals, on a placer value chart and on a number line.
- Divide a 1 umber by 10, divide a 2 digit number by 10
- 1/100 as fractions, decimals and on a place value chart
- Divide a 1 or 2 digit number by 100

Topic: Length and perimeter (2 week)
Objectives:
- Convert between different units of measure (e.g. km to m, hr to min)
- Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m
- Find the area of rectilinear shapes by counting squares

Topic: Fractions
Objectives:
- 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
- Solve simple measure and money problems involving fractions and decimals to two decimal places

Summer 2

Topic: Decimals
Objectives:
- Round decimals with one decimal place to the nearest whole number
- Make a whole with tenths, hundreds
- Partition decimals, flexibly partition decimals
- Compare and order decimals
- Round to the nearest whole number, halves and quarters as decimals

Topic: Consolidation + end – 2 weeks
Objectives:
- Add and subtract numbers with up to 4 digits using formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation