

## **Year 4 Maths Overview**

# **Cathcart Street Primary School 2023-2024**

	Autumn 1	Spring 1	Summer 1	
	Year 4 NC Objectives	Year 4 NC Objectives	Year 4 NC Objectives	
Maths – 1 <sup>st</sup> half term	NUMBER: Place Value  Identify, represent and estimate numbers using different representations  Count in multiples of 6, 7, 9, 25 and 1,000  Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones)  Find 1,000 more or less than a given number  Order and compare numbers beyond 1,000  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  Round any number to the nearest 10, 100 or 1,000  Count backwards through zero to include negative numbers  Solve number and practical problems that involve all of the above and with increasingly large positive numbers  NUMBER: Addition & Subtraction  Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate  Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why  Estimate and use inverse operations to check answers to a calculation	NUMBER: Multiplication and Division  Recognise and use factor pairs and commutativity in mental calculations  Recall multiplication and division facts for multiplication tables up to 12 × 12 Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as <i>n</i> objects are connected to <i>m</i> objects  Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout  Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers  Measurement: Length and Perimeter  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	Number: Decimals  Recognise and write decimal equivalents of any number of tenths or hundredths  Solve simple measure and money problems involving fractions and decimals to 2 decimal places  Compare numbers with the same number of decimal places up to 2 decimal places  Round decimals with 1 decimal place to the nearest whole number  Recognise and write decimal equivalents to 1/4, 1/2 and 3/4  MEASUREMENT: Money  Estimate, compare and calculate different measures, including money in pounds and pence  MEASUREMENT: Time  Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days  Read, write and convert time between analogue and digital 12- and 24-hour clocks	
	Autumn 2	Spring 2	Summer 2	

# Maths – 2nd half term

### Measurement: Area

Find the area of rectilinear shapes by counting squares

### **NUMBER: Multiplication and Division**

- Recall multiplication and division facts for multiplication tables up to 12 × 12
- Recognise and use factor pairs and commutativity in mental calculations
- 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 Count in multiples of 6, 7, 9, 25 and 1,000

### **NUMBER: Fractions**

- Recognise and show, using diagrams, families of common equivalent fractions
- Add and subtract fractions with the same denominator
- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including nonunit fractions where the answer is a whole number

### **Number: Decimals**

- Recognise and write decimal equivalents of any number of tenths or hundredths
- Compare numbers with the same number of decimal places up to 2 decimal places
- Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- Recognise and show, using diagrams, families of common equivalent fractions

### **Geometry: Shape**

- Identify acute and obtuse angles and compare and order angles up to two right angles by size
- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- 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

### Statistics

- 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

### **Geometry: Position and Direction**

- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
- Describe positions on a 2-D grid as coordinates in the first quadrant
- Plot specified points and draw sides to complete a given polygon
- Describe movements between positions as translations of a given unit to the left/right and up/down

### Vocabulary

Key Vocabulary: Building on vocabulary from KS1 and Y3

Number and Place Value	Multiplication and Division	Measure	Geometry (Position and Direction)	Geometry (Properties of Shape)	Fractions and Decimals	Data / Statistics
tenths, hundredths	multiplication facts (up to 12x12)	convert analogue and digital 12- and	coordinates	quadrilaterals	families of common equivalent decimals	continuous data
decimal (places)	division facts	24- hour clocks	translation left/right up/down	triangles	and fractions	line graph
round (to nearest)	inverse	convert from hours to minutes; minutes	quadrant	right angle acute and obtuse	numbers with up to 2 decimal places	
thousand more/less		to seconds; years to	·	angles	(tenths, hundredths)	
than	derive	months; weeks to days	x-axis, y-axis	degrees		
negative integers	quotient	area of rectilinear	perimeter and area	symmetric		
count through zero	divisor	shapes		Symmetric		
Roman numerals to 100 = C	dividend					
	integer scaling					