



# Curriculum Outline Year 6

A Guide for Year 6 Math Curriculum

# YEAR 6

10-11 years

## UNIT 1

### NUMBER: PLACE VALUE

- Numbers to 10,000
- Numbers to 100,000
- Numbers to a million
- Numbers to ten million
- Compare and order any number
- Round numbers to 10, 100 and 1,000
- Round any number
- Negative numbers

## UNIT 2

### NUMBER: FOUR OPERATIONS

- Add whole numbers with more than 4 digits
- Subtract whole numbers with more than 4 digits
- Inverse operations (addition and subtraction)
- Multi-step addition and subtraction problems
- Add and subtract integers
- Multiply 4-digits by 1-digit
- Multiply 2-digits (area model)

## UNIT 2

- Multiply 2-digits by 2-digits
- Multiply 3-digits by 2-digits
- Multiply up to a 4-digit number by 2-digit number
- Divide 4-digits by 1-digit
- Divide with remainders
- Short division
- Division using factors
- Long division (1)
- Long division (2)
- Long division (3)
- Long division (4)
- Factors
- Common factors
- Common multiples
- Primes to 100
- Squares and cubes
- Order of operations
- Mental calculations and estimation
- Reason from known facts

## UNIT 3

### NUMBER: FRACTIONS

- Equivalent fractions
- Simplify fractions
- Improper fractions to mixed numbers
- Mixed numbers to improper fractions
- Fractions on a number line
- Compare and order (denominator)
- Compare and order (numerator)
- Add and subtract fractions (1)
- Add and subtract fractions (2)
- Add mixed numbers
- Add fractions
- Subtract mixed numbers
- Subtract fractions
- Mixed addition and subtraction
- Multiply fractions by integers
- Multiply fractions by fractions
- Divide fractions by integers (1)
- Divide fractions by integers (2)
- Four rules with fractions
- Fraction of an amount
- Fraction of an amount – find the whole

## UNIT 4

### GEOMETRY: POSITION & DIRECTION

- The first quadrant
- Four quadrants
- Translations
- Reflections

## UNIT 1

### NUMBER: DECIMALS

- Decimals up to 2 decimal places
- Understand thousandths
- Three decimal places
- Multiply by 10, 100 and 1,000
- Divide by 10, 100 and 1,000
- Multiply decimals by integers
- Divide decimals by integers
- Division to solve problems
- Decimals as fractions
- Fractions to decimals (1)
- Fractions to decimals (2)

## UNIT 2

### NUMBER: PERCENTAGES

- Understand percentages
- Fractions to percentages
- Equivalent FDP
- Order FDP
- Percentage of an amount (1)
- Percentage of an amount (2)
- Percentages – missing values

## UNIT 3

### NUMBER: ALGEBRA

- Find a rule – one step
- Find a rule – two step
- Forming expressions
- Substitution
- Formulae
- Forming equations
- Solve simple one-step equations
- Solve two-step equations
- Find pairs of values
- Enumerate possibilities

## UNIT 4

### MEASUREMENT: CONVERTING UNITS

- Metric measures
- Convert metric measures
- Calculate with metric measures
- Miles and kilometres
- Imperial measures

## UNIT 5

### MEASUREMENT: PERIMETER, AREA & VOLUME

- Shapes – same area
- Area and perimeter
- Area of a triangle (1)
- Area of a triangle (2)
- Area of a triangle (3)
- Area of parallelogram
- What is volume?
- Volume – counting cubes
- Volume of a cuboid

## UNIT 6

### NUMBER: RATIO

- Using ratio language
- Ratio and fractions
- Introducing the ratio symbol
- Calculating ratio
- Using scale factors
- Calculating scale factors
- Ratio and proportion problems

## UNIT 1

### STATISTICS

- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems
- Circles
- Read and interpret pie charts
- Pie charts with percentages
- Draw pie charts
- The mean

## UNIT 2

### GEOMETRY: PROPERTIES OF SHAPE

- Measure with a protractor
- Draw lines and angles accurately
- Introduce angles
- Angles on a straight line
- Angles around a point
- Calculate angles
- Vertically opposite angles
- Angles in a triangle
- Angles in a triangle – special cases
- Angles in a triangle – missing angles
- Angles in special quadrilaterals
- Angles in regular polygons
- Draw shapes accurately
- Draw nets of 3-D shapes