

Number

Shape  
and Space

Algebra

Data

Measures

# NUMBER

## Addition, Subtraction, Multiplication and Division, Fractions, Decimals



- Explore and identify place value in whole numbers 0 - 9999
- Read, write and order 4-digit numbers and solve simple problems
- Round whole numbers to the nearest 1000
- Know and recall addition and subtraction facts
- Add without and with renaming from 0 - 9999
- Use a calculator to check estimates
- Subtract with and without renaming within 0- 9999
- Solve word problems involving addition and subtraction



- Develop an understanding of multiplication as repeated addition and vice versa
- Explore, understand and apply the zero and commutative properties of multiplication
- Develop and recall multiplication facts within 100
- Multiply a 2-digit or 3-digit number by 10
- Multiply a 2-digit or 3-digit number by a 1-digit number or a 2-digit number
- Solve and complete practical tasks and problems involving multiplication of whole numbers
- Develop an understanding of division as sharing and as repeated subtraction, without and with remainders.
- Develop and recall division facts within 100
- Solve and complete practical tasks and problems involving division of whole numbers
- Estimate answers to division questions
- Use a calculator to check estimates
- Divide a 3-digit number by a 1-digit number without and with remainders



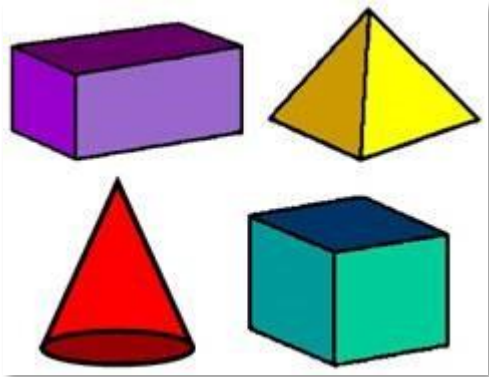
### Fractions

- Identify fractions and equivalent forms of fractions with denominators 2, 4, 8
- Identify fractions and equivalent forms of fractions with denominators 5 and 10
- Identify fractions and equivalent forms of fractions with denominators 3, 6, 9, 12
- Solve and complete practical tasks involving fractions
- Calculate a fraction of a set using concrete materials
- Calculate a number, given a multiple fraction of the number
- Express one number as a fraction of another number
- Solve and complete practical tasks and problems involving fractions

### Decimals

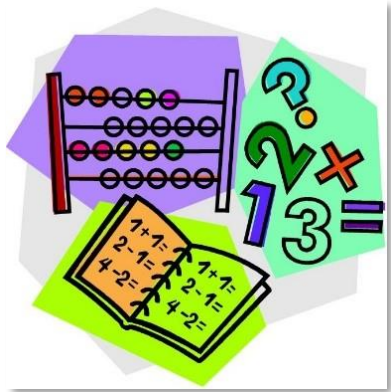
- Identify place value of whole numbers and decimals to 2 places
- Express tenths and hundredths as fractions and decimals
- Identify place value of whole numbers and decimals to 2 places and write in expanded form
- Order decimals on the number line
- Add and subtract whole numbers and decimals up to 2 places
- Multiply and divide a decimal number up to 2 places by a single-digit whole number
- Solve problems involving decimals

# SHAPE AND SPACE



- Identify, describe and classify oblique and perpendicular lines
- Draw, discuss and describe intersecting lines and their angles
- Classify angles as greater than, less than or equal to a right angle
- Identify line symmetry in the environment
- Identify lines of symmetry as horizontal, vertical or diagonal
- Use understanding of line symmetry to complete missing half of a shape, picture pattern
- Identify, describe and classify 2D shapes: equilateral, isosceles and scalene triangles, parallelogram, rhombus, pentagon, octagon
- Explore, describe and compare the properties (sides, angles, parallel and non-parallel lines) of 2D shapes
- Construct and draw 2D shapes
- Combine, tessellate and make patterns with 2D shapes
- Identify the use of 2D shapes in the environment
- Solve and complete practical tasks and problems involving 2D shapes
- Identify, describe and classify 3D shapes, including cube, cuboid, cylinder, cone, sphere, triangular prism and pyramid
- Establish and appreciate that when prisms are sliced through (in the same direction) each face is equal in shape and size
- Explore and describe the relationship of 3D shapes with constituent 2D shapes
- Construct 3D shapes
- Solve and complete practical tasks and problems involving 3D shapes

# ALGEBRA



- Explore, extend and describe sequences
- Explore, recognise and record patterns in number 0-9999
- Use patterns as an aid in the memorisation of number facts
- Translate addition and subtraction number sentences with a frame into word problems
- Translate multiplication and division number sentences with a frame into word problems
- Translate a 1-step word problem into a number sentence
- Solve 1-step number sentences

# DATA



## Graphs

- Collect, organise and represent data using block graphs and bar charts incorporating the scales 1:2, 1:5, 1:10, 1:100
- Collect, organise and represent data using bar line charts
- Read and interpret simple pie charts
- Use data sets to solve and complete practical tasks and problems

## Chance

- Use vocabulary of uncertainty and chance: chance, likely, unlikely, never, definitely
- Order events in terms of likelihood of occurrence
- Identify and record outcomes of simple random processes

# MEASURES

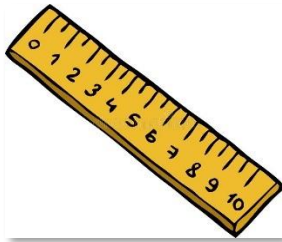
## Time, Money, Length, Height, Width, Weight, Capacity and Area



- Read time in 1-minute intervals on an analogue clock (12 hour)
- Solve and complete practical tasks and problems involving times and dates and the addition of hours and minutes
- Express digital time as analogue time and vice versa
- Read and interpret simple timetables
- Read dates from calendars and express weeks as days and vice versa
- Solve and complete practical tasks involving dates
- Solve and complete practical tasks and problems involving the addition of hours and minutes



- Record amounts of money using € symbol and decimal point
- Rename amounts of money as euro or cent and record amounts of money using € symbol and decimal point
- Solve and complete practical 1-step and 2-step problems and tasks involving the addition, subtraction, multiplication, and division of money



- Estimate, compare, measure and record lengths of a wide variety of objects using appropriate metric units and selecting suitable instruments of measurement
- Rename units of length in decimal form
- Solve and complete practical tasks and problems involving the addition, subtraction, multiplication, and simple division of units of length (metres, centimetres and kilometres)
- Understand, estimate and measure the perimeter of regular 2D shapes



- Estimate, compare, measure and record the weight of a wide variety of objects using appropriate metric units (kilogram, gram) and selecting suitable instruments of measurement
- Rename units of weight in kg and g
- Rename units of weight using decimal or fraction form
- Solve and complete practical problems involving the addition, subtraction, multiplication and division of units of weight (kg and g)



- Estimate, compare, measure and record capacity using appropriate metric units (litres, millilitres) and select instruments of measurement
- Rename units of capacity in litres and millilitres
- Rename units of capacity using decimal and fraction form
- Solve and complete practical tasks and problems involving the addition, subtraction, multiplication and simple division of units of capacity (litres and millilitres)



- Estimate, compare and measure the area of regular and irregular shapes
- Solve and complete practical tasks and problems using area