

Royale Tutors

Year 1 Mathematics Curriculum

1. Number – Number and Place Value

- Count to and across 100, forwards and backwards from any number.
- Count, read and write numbers to 100 in numerals.
- Count in multiples of 2s, 5s and 10s.
- Identify one more and one less than a given number.
- Compare and order numbers using the symbols: $>$, $<$, $=$.
- Use place value and number facts to solve problems.

2. Number – Addition and Subtraction

- Represent and use number bonds within 20 (e.g., $5 + 3 = 8$).
- Read, write, and interpret mathematical statements involving $+$, $-$ and $=$.
- Add and subtract one-digit and two-digit numbers to 20, including zero.
- Solve one-step problems using objects, pictures and number lines.

3. Number – Multiplication and Division (Introductory Concepts)

- Count in 2s, 5s and 10s (linking to multiplication).
- Solve simple problems involving grouping and sharing.

4. Number – Fractions

- Recognise, find and name $\frac{1}{2}$ as one of two equal parts of an object, shape, or quantity.
- Recognise, find and name $\frac{1}{4}$ as one of four equal parts of an object, shape, or quantity.

5. Measurement

- Compare, describe and solve practical problems for:
 - - Length and height (long/short, tall/short, longer/shorter)
 - - Mass/weight (heavy/light, heavier than/lighter than)
 - - Capacity/volume (full/empty, more than/less than)
 - - Time (quicker/slower, earlier/later)
- Measure and begin to record:
 - - Length and height
 - - Mass/weight
 - - Capacity and volume

- - Time (hours, minutes, seconds)
- Recognise and know the value of coins and notes.
- Sequence events in chronological order.
- Recognise and use language relating to dates, including days of the week, months and years.
- Tell the time to the hour and half past the hour; draw hands on a clock face.

6. Geometry – Properties of Shapes

- Recognise and name common 2-D shapes (e.g., rectangles, squares, circles, triangles).
- Recognise and name common 3-D shapes (e.g., cuboids, cubes, pyramids, spheres).

7. Geometry – Position and Direction

- Describe position, direction and movement, including:
 - - Whole, half, quarter and three-quarter turns
 - - Left, right, above, below

8. Statistics (Informal Introduction)

- Sort objects into groups.
- Use tally marks and pictograms with guidance.
- Talk about the most/least/fewest/more.

Suggested Termly Breakdown

- Autumn: Place value, number bonds, addition/subtraction, 2-D shapes
- Spring: Measurement (length, weight, time), introduction to money
- Summer: Fractions, 3-D shapes, position & direction, word problems

Royale Tutors Year 2 Mathematics Curriculum

1. Number – Number and Place Value

- Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.
- Recognise the place value of each digit in a two-digit number (tens, ones).
- Identify, represent and estimate numbers using different representations, including the number line.
- Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs.
- Read and write numbers to at least 100 in numerals and in words.
- Use place value and number facts to solve problems.

2. Number – Addition and Subtraction

- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - - A two-digit number and ones
 - - A two-digit number and tens
 - - Two two-digit numbers
 - - Adding three one-digit numbers
- Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

3. Number – Multiplication and Division

- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the symbols \times , \div and $=$.
- Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.
- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts.

4. Number – Fractions

- Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.
- Write simple fractions, for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

5. Measurement

- Choose and use appropriate standard units to estimate and measure length/height, mass, temperature, and capacity.
- Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$.
- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.
- Find different combinations of coins that equal the same amounts of money.
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit.
- Compare and sequence intervals of time.
- Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
- Know the number of minutes in an hour and the number of hours in a day.

6. Geometry – Properties of Shapes

- Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
- Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.
- Identify 2-D shapes on the surface of 3-D shapes (e.g., a circle on a cylinder, a triangle on a pyramid).
- Compare and sort common 2-D and 3-D shapes and everyday objects.

7. Geometry – Position and Direction

- Order and arrange combinations of mathematical objects in patterns and sequences.
- Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

8. Statistics

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
- Ask and answer questions about totalling and comparing categorical data.

Suggested Termly Breakdown

- Autumn: Place value, addition & subtraction, simple shapes and data handling.
- Spring: Multiplication, division, fractions, money and time.
- Summer: Geometry, measurements, problem-solving, revision and assessments.

