Year 2 Programme of study for Mathematics — 13 Key Objectives are underlined

Number & 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.

Addition & Subtraction

Recall and use addition and subtraction facts to 20 and 100:

- fluently up to 20;
- related facts 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.

Solve problems with addition and subtraction:

- Using concrete objects and pictorial representations, including those involving numbers, quantities and measures;
- Applying their increasing knowledge of mental and written methods.

Multiplication & 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 multiplication (×), division (÷) and equals (=) signs.
- 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, including problems in contexts.

Fractions

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

Measurement

Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels:

- length/height in any direction (m/cm);
- mass (kg/g);
- temperature (°C);
- capacity (litres/ml).

- 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, including giving change.
- 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 number of hours in a day.

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 *[for example, a circle on a cylinder and a triangle on a pyramid].*
- Compare and sort common 2-D and 3-D shapes and

Geometry: Position & 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).

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

End of key stage 1: Know number bonds to 20; be precise in using place value; read and spell mathematical vocabulary at a level consistent with their increasing work reading and spelling knowledge at key stage 1.