

# STANBRIDGE LOWER SCHOOL

# New National Curriculum 2014 - Programmes of Study

### Maths- Year 2

#### Spoken Language (Yr1-Yr4)

\*Listen and respond \*ask questions to extend understanding and knowledge \*build vocabulary \*articulate and justify answers, arguments and opinions \*give well structure description \*participate actively in collaborative conversations \*speculate, hypothesise, imagine and explore ideas \*participate in discussions, presentations, performances, role play, improvisations and debates \*gain, maintain and monitor the interest of the listener(s) \*consider and evaluate different viewpoints.

#### Number - number and place value

- count in steps of 2,3,5 from 0, and in tens from any number, forward and backward
- recognise the place value of each digit in a two digit number (tens and 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

## Number - addition and subtractions

Solve problems with + and - :

- use concrete objects and pictorial representations, including those involving numbers, quantities and measures
- applying their increasing knowledge of mental and written methods
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- + and numbers using objects, pictures and mentally:
- 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.

#### Number - multiplication and division

- Recall and use multiplication and division facts for the 2,5,10 multiplication tables, including recognizing odd and even numbers
- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication(x), 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.

#### Geometry - proportion of shapes

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

## 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)

#### Measurement

- Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( ${}^{\circ}C$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring
- 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
- 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 the number of hours in a day.

#### **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.
- and recognise the equivalent of 2/4 and 1/2.

# • Write simple fractions Eg. 1/2 of 6 = 3

#### 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 totaling and comparing categorical data