



STANBRIDGE LOWER SCHOOL

New National Curriculum 2014 - Programmes of Study

Maths- Year 4

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 multiples of 6,7,9,25 and 1000
- find 1000 more or less than a given number
- count backwards through zero to include negative numbers
- recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and units)
- order and compare numbers beyond 1000
- identify, represent and estimate numbers using different representations
- round any number to the nearest 10,100,1000
- solve number and practical problems that involve all of the above and with increasingly large positive numbers
- Read Roman numerals to 100 I-C) and know that over time, the numeral system changed to include the concept of zero and place value.

Number - addition and subtractions

- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation
- Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why

Number - multiplication and division

- Recall multiplication and division facts for multiplication tables up to 12×12 .
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Recognise and use factor pairs and commutatively in mental calculations
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Solve problems involving multiplying and adding, including using the distributive law to multiplying two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Statistics

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Number - fractions

- Recognise and show, using diagrams, families of common equivalent fractions
- Count up and down in hundredths; recognize that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Solve problems involving increasingly harder fractions to calculate quantities and fractions to divide quantities including non-unit fractions where the answer is a whole number
- Add and subtract fractions with the same denominator
- Recognise and write decimal equivalents of any number of tenths or hundredths
- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$.
- Find the effect of dividing a one or two digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.
- Round decimals with one decimal place to the nearest whole number
- Compare numbers with the same number of decimal places up to two decimal places
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

Measurement

- Convert between different units of measure Eg. Kilometer to metre; hour to minute
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimeters and metres
- Find the area of rectilinear shapes by counting squares
- Estimate, compare and calculate the different measures including money in pounds and pence
- Read, write and convert time between analogue and digital 12 and 24 hour clocks
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Geometry - proportion of shapes

- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- Identify acute and obtuse angles and compare and order angles up to two right angles by size
- Identify lines of symmetry in 2D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry
- Describe positions on a 2d grid as coordinates in the first quadrant
- Describe movements between positions as translations of a given unit to the left/right and up/down
- Plot specified points and draw sides to complete a given polygon

