

# CLIPSTONE BROOK LOWER SCHOOL

## New National Curriculum 2014 - Programmes of Study

### Maths- Year 3

#### 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 from 0 in multiples of 4,8,50 and 100; find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number (hundreds, tens and ones) compare and order numbers up to 1000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1000 in numerals and in words
- solve number problems and practical problems involving these ideas.

#### Number - addition and subtractions

- Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds
- Add and subtract numbers with up to three digits, using formal written methods of column addition and subtraction
- Estimate the answer to a calculation and use inverse operations to check answers
- Solve problems including missing number problems using number facts, place value and more complex addition and subtraction.

#### Number - multiplication and division

- Revise and use multiplication and division facts for the 3,4 and 8 multiplication tables
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know including two-digit numbers times one digit numbers using mental and progressing to formal written methods
- Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

#### Number - fractions

- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.
- Recognise, find and write fractions of a discrete set of objects; unit fractions and non-unit fractions with small denominators
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- Recognise and show, using diagrams, equivalent fractions with small denominators
- Add and subtract fractions with the same denominator within one whole Eg.  $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$
- Compare and order unit fractions and fractions with the same denominators
- Solve problems that involve all of the above.

#### Geometry - proportion of shapes

- Draw 2D shapes and make 3D shapes using modeling materials; recognise 3D shapes in different orientations and describe them.
- Recognise angles as a property of shape or a description of a turn
- Identify right angles, recognise that two right angles make a half turn, three make a three quarters turn and four a complete turn; identify whether angles are greater than or less than a right angle
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

#### Measurement

- Measure, compare, add and subtract: lengths (m,cm,mm); mass (kg/g); volume/capacity (l/ml)
- Measure the perimeter of simple 2D shapes
- Add and subtract amounts of money to give change, sing both £/p in practical contexts
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12 hour and 24 hour clocks
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight
- Know the number of seconds in a minute and the number of days in a months, year and leap year
- Compare durations of events Eg to calculate the time taken by particular events or tasks.

#### Statistics

- Interpret and construct simple bar charts, pictograms and tables
- Solve one step and two step questions Eg. How many more? And How many fewer? Using information presented in scaled bar charts, pictograms and tables.

