

# Maths

## Early Years

**Number** Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number -

Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer - They solve problems, including doubling, halving and sharing.

### Shape Space and Measure

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns.

They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

**Year 1 Number/Calculation** Count to / across 100 - Count in 1s, 2s, 5s and 10s - Identify 'one more' and 'one less' - Read and write numbers to 20 - Use language, e.g. 'more than', 'most' Use +, - and = symbols - Know number bonds to 20 add and subtract one-digit and two-digit numbers to 20, including zero - Solve one-step problems, including simple arrays

**Geometry & Measures** Use common vocabulary for comparison, e.g. heavier, taller, full, longest, quickest - Begin to measure length, capacity, weight - Recognise coins & notes - Use time and ordering vocabulary - Tell the time to hour/half-hour - Use language of days, weeks, months and years - Recognise and name common 2-d and 3-d shapes - Order and arrange objects - Describe position and movement, including half and quarter turns

**Fractions** Recognise and use  $\frac{1}{2}$  and  $\frac{1}{4}$

**Year 2 Number/Calculation** Know 2, 5, 10x tables - Begin to use place value (T/U) - Count in 2s, 3s, 5s & 10s - Identify, represent & estimate numbers - Compare/order numbers, inc.  $< > =$  - Write numbers to 100 - Know number facts to 20 (+ related to 100) - Use x and  $\div$  symbols - Recognise commutative property of multiplication

**Geometry & Measures** Know and use standard measures - Read scales to nearest whole unit - Use symbols for  $\pounds$  and p and add/subtract simple sums of less than  $\pounds 1$  or in pounds - Tell time to the nearest 5 minutes - Identify & sort 2-d & 3-d shapes - Identify 2-d shapes on 3-d surfaces - Order and arrange mathematical objects - Use terminology of position & movement **Fractions** Find and write simple fractions - Understand equivalence of e.g.  $\frac{2}{4} = \frac{1}{2}$  **Data** Interpret simple tables & pictograms - Ask & answer comparison and totalling questions

**Year 3 Number/Calculation** Learn 3, 4 and 8x tables - Secure place value to 100 - Mentally add and subtract units, tens or hundreds to numbers of up to 3 digits - Written column addition and subtraction - Solve number problems, including multiplication and simple division and missing number problems - Use commutativity to help calculations **Geometry and Measures** Measure and calculate with metric measures - Measure simple perimeter - Add/subtract using money in context - Use Roman numerals up to XII; tell time - Calculate using simple time problems - Draw 2-d/ Make 3-d shapes - Identify and use right angles - Identify horizontal, vertical, perpendicular and parallel lines **Fractions & decimals** Use and count in tenths - Recognise, find and write fractions - Recognise some equivalent fractions - Add/subtract fractions up to  $< 1$  - Order fractions with common denominator **Data** Interpret bar charts and pictograms

**Year 5 Number/Calculation** Secure place value to 1,000,000 - Use negative whole numbers in context - Use Roman numerals to 1000 (M) - Use standard written methods for all four operations - Confidently add and subtract mentally - Use vocabulary of prime, factor and multiple - Multiply and divide by powers of ten - Use square and cube numbers **Geometry & Measures** Convert between different units - Calculate perimeter of composite shapes and area of rectangles - Estimate volume and capacity - Identify 3-d shapes - Measure and identify angles - Understand regular polygons - Reflect and translate shapes **Data** Interpret tables and line graphs - Solve questions about line graphs **Fractions** Compare and order fractions - Add and subtract fractions with common denominators, with mixed numbers - Multiply fractions by units - Write decimals as fractions - Order and round decimal numbers - Link percentages to fractions and decimals

**Year 6 Number/Calculation** Secure place value & rounding to 10,000,000, including negatives - All written methods, including long division - Use order of operations - Identify factors, multiples & primes - Solve multi-step number problems

**Algebra** Introduce simple use of unknowns **Geometry & Measures** Confidently use a range of measures & conversions - Calculate area of triangles / parallelograms - Use area & volume formulas - Classify shapes by properties - Know and use angle rules - Translate & reflect shapes, using all four quadrants **Data** Use pie charts  $\square$  Calculate mean averages

**Fractions, decimals & percentages** Compare & simplify fractions - Use equivalents to add fractions - Multiply simple fractions - Divide fractions by whole numbers - Solve problems using decimals & percentages - Use written division up to 2dp - Introduce ratio & proportion

## Year 4 Number/Calculation

Know all tables to  $12 \times 12$  - Secure place value to 1000 - Use negative whole numbers - Round numbers to nearest 10, 100 or 1000 - Use Roman numerals to 100 (C) - Column addition and subtraction up to 4 digits - Multiply and divide mentally - Use standard short multiplication

**Geometry & Measures** Compare 2-d shapes, including quadrilaterals and triangles - Find area by counting squares - Calculate rectangle perimeters - Estimate and calculate measures - Identify acute, obtuse and right angles - Identify symmetry - Use first quadrant coordinates - Introduce simple translations **Data** Use bar charts, pictograms and line graphs

**Fractions & decimals** Recognise tenths and hundredths - Identify equivalent fractions - Add and subtract fractions with common denominators - Recognise common equivalents - Round decimals to whole numbers - Solve money problems

## Abacus

The teaching of maths at South Bersted CE Primary School is supported by the Abacus scheme of work.

Teachers adapt the scheme planning to meet the needs of the children in their class.