St John's Church of England Primary School, Watford

The Year 1 Maths Learner

At St John's we aim for children to embrace maths as an interesting and engaging subject. Through our Growth Mindset approach of embracing mistakes we support children to think as mathematicians. We want our children to be able to confident with reasoning, problem solving and to be numerically fluent.

Working mathematically

By the end of year 1, children begin to solve simple problems involving addition and subtraction in familiar contexts such as going shopping, using a range of hands-on equipment, symbols, images and pictures. They begin to use what they know to tackle problems that are more complex and provide simple reasons for their opinions. All learning will be concrete/pictorial/abstract (CPA) which enables children to build firm foundations for their number knowledge.

Number

- **Counting and understanding numbers**

Children will identify and represent numbers using objects, pictures and models, such as the number line, and use 'equal to, more than, less than (fewer), most and least.' Children will accurately count numbers to, and across, 100 forwards and backwards from any given number with increasing understanding. They count, read, write and order numbers in numerals up to 100 and from 1 to 20 in words. When given a number, they can identify one more and one less. They can count in multiples of twos, fives and tens.

- **Calculating**

Children will understand known addition and subtraction facts within 20, including zero. They will demonstrate an understanding of multiplication and division through grouping and sharing using hands-on resources, pictorial representations and arrays (2, 5 and 10). They understand doubling and halving small quantities**.**

- **Fractions**

Through play and hands-on resources, children will find and name half and one quarter of objects, shapes and quantities.

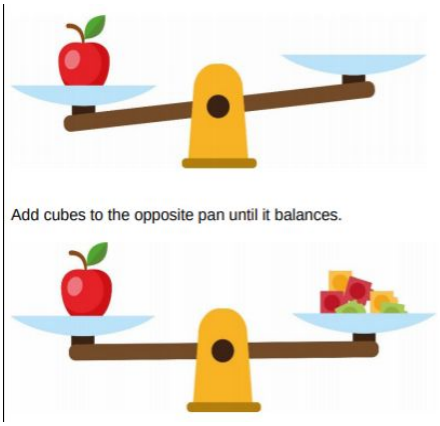
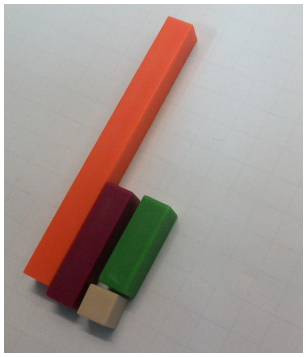
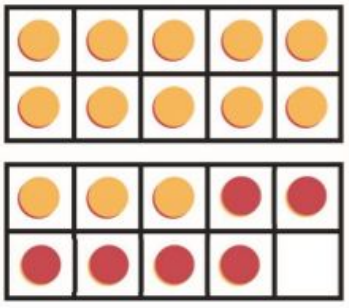
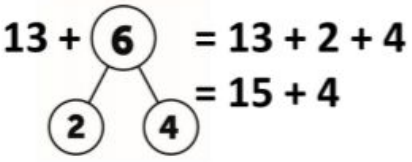
Measurement

Children will begin to measure using non-standard units (finger widths, blocks etc.) moving to standard units of measure (e.g. cm) using tools such as a ruler, weighing scales and containers. They will begin to record and compare measurements such as lengths and heights, mass and weight, capacity and volume using language such as long / short; heavy / light; full / half-full / empty. They will tell the time to the hour, half past the hour and

be able to sequence events in chronological order using precise language (for example, before and after, next, first, today etc.). Children will recognise and know the value of different denominations of coins and notes.

Geometry

Children will recognise and name common 2-D shapes, e.g. rectangles (including squares), circles and triangles, and 3-D shapes, e.g. cuboids (including cubes, pyramids and spheres) in different orientations and sizes. They will describe position, direction and movement, including whole, half and three quarter turns.

Statistics

In preparation for year 2, children will begin to compare, sort and classify information, including through cross curricular links e.g. science – sorting materials into groups according to their properties. They will also begin to construct simple pictograms and tables.