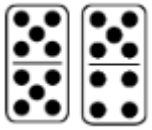
Foundation Stage Mathematics Policy

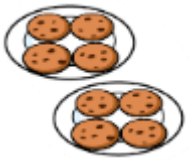
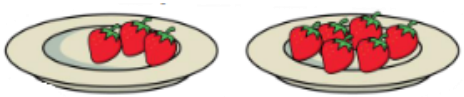
At Woodcote Primary School, we aim to equip our Foundation children with the skills, knowledge and understanding in early mathematics to allow them to transition to Key Stage 1 with the tools they need to succeed. The curriculum will embed mathematical thinking and talk, and allow for key concepts to be revisited during the year. The EYFS curriculum is based on a child's ability to have a deep understanding of number to 10, and understand the different principles behind counting.

Children will explore their maths using a variety of concrete and pictorial equipment within the classroom and the wider environment, and be given opportunities to develop their understanding through stories, art, modelling and messy play. They will enjoy adult focused activities as the year progresses, alongside child initiated experiences daily.

Children will be given opportunities to extend and develop their skills through practical experiences.

Key Vocabulary for adults:- cardinal, ordinal, numeral, number, quantity, partition, more, less, share, equal, unequal, group.
Numbers:- 1 through to 20, with a deep understanding of numbers to 10
Key texts:- Two of Everything – Lily Hong; This is the Story of Alison Hubble – Allan Ahlberg;

Number	Addition and Subtraction	Doubles, Halves, Odds, Evens	Rapid Recall
Children will have a deep understanding of numbers to 10. This includes knowing the number bonds to 10, and that each number to 10 is made up of other numbers. They will be able to demonstrate how to make these numbers using a range of equipment and talk.   	Addition and subtraction will be rooted in the understanding that adding to a group makes that group bigger, while taking away makes the group smaller. Using familiar objects and pictures, together with equipment, children will add and take away, firstly re - counting until a sense of number conservation is gained.	Children will learn that doubling means twice as many, or the "same again". Opportunities to build doubles from differing materials and the use of language will build knowledge and understanding.   Providing opportunities to sort doubles and non-doubles will give children means to explain their understanding. By building on the children's knowledge of sharing, such as for snacks, children begin to share objects in to two equal groups. This is reinforced by play opportunities, such as retelling the Teddy Bears' Picnic.	Children must show rapid recall of number bonds to 5, and some bonds to 10, including doubles. Children will be helped to achieve this by regular practice, understanding of number, and use of equipment. Use of chanting, rhymes and stories, and games will all be used to aid this.

Children will count verbally beyond 10 to 20. Using practical equipment they will explore the patterns found in these numbers, and make and order them.  Using equipment, children will build numbers to 20 and understand that they have one 10 and *n* more. This is reinforced by daily activities, such as looking at the calendar and making the date using Numicon, or representing the number of children at school each day.		  Using language such as fair and unequal, children understand that groups must be equal. From two groups, children move to making groups of three and more. They will be given the opportunity to practically investigate what happens when you can't share equally,  Or that some numbers of objects can be shared equally in different ways. 	

Key Vocabulary:- same/different; sort; match; rule; big/little; large/small; tall/short; equal; night, day, morning, afternoon, evening, before, after, today, tomorrow; square, oblong, rectangle, corner, triangle.
Shapes:- square, circle, triangle, cube; colours:- red, yellow, blue, green
Key texts:- We're Going on a Bear Hunt; Dear Zoo – Jez Alborough; The Enormous Turnip; My Cat likes to Hide in Boxes; Funny Bones- Alan Ahlberg; Peace at Last –Jill Murphy; The Very Hungry Caterpillar – Eric Carle;

Matching, sorting and sequencing	Weights and Measures	Shape and Space	Time
Children will sort buttons, leaves, animals etc into sets according to rules. Adults will sort objects into sets and ask children to find the rule and explain it. What is the same? What is different?  Which set has more? Which set has less? Children will compare sets of different objects against each other and distinguish size or quantity. Children will be encouraged to say out loud the repeating patterns they build.  Children will build patterns, use rhyme and song, and develop patterns of their own.	Children will learn that objects can be compared by size. Using "messy play" children will have opportunities to compare volume of sand, water and empty boxes.  Using balance scales, children will compare masses of objects, be challenged to make playdough balls of equal mass.	Children will learn that squares and oblongs have 4 sides and 4 corners. Children will see that the shape does not change if the shape is rotated.  Children will build squares and oblongs from other squares and oblongs and triangles, and explain what they have done. Children will build on their spatial awareness using shapes to create patterns and pictures.  Identifying the shapes they have used, and will need to complete the pattern and create pictures accurately.	Children will order the events in their daily routines. They will use a visual timetable during the day. Activities will be focused on practical understanding of the passing of time, use of "number of sleeps till", birthday calendars, and sand timers to measure the passing of immediate time.  In wider school life such as during playtime and PE, children can use time to measure performance. How many goals can you score in…Who can score more?

Patterns will be built using a range of objects, including Numicon, building bricks and natural materials.  Children will be challenged to spot the errors in patterns, create their own and copy those of others.	 Using a feely bag will challenge children to find same sized Numicon shapes, larger or smaller shapes. 		How many laps of the field can you run in…?

At the end of the Reception year, all children are assessed against the two mathematical Early Learning Goals:

- Number
- Numerical Patterns

Achieving these Early Learning Goals indicate that a child has reached the desired level of knowledge and skill which will allow them to access the National Curriculum from Year 1 onwards with confidence.

Number Early Learning Goal	**Numerical Pattern** Early Learning Goal
• Have a deep understanding of number to 10, including composition of each number. • Subitise (recognise quantities without counting) up to 5. • Automatically recall (without reference to rhymes, counting or other aids), number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.	• Verbally count beyond 20, recognising the pattern of the counting system. • Compare quantities in 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.