EYFS Maths Curriculum Map

Reception

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Getting to know you (Take this time to play and get to know the children!)			Just like me!			It's me 1, 2, 3!			Light and Dark		
Spring	Alive in 5!			Growing 6, 7, 8			Building 9 and 10			Consolidation		
Summer	On the move			Superhero to 20 and beyond			First, then, now			Find my pattern		

Mathematics

A Unique Child: what a child might be doing	Positive Relationships: what adults might do	Enabling Environments: what adults might provide
	• Model comparing numbers in problems about fair shares. • Play games such as hide and seek that involve counting, forwards and backwards. • Talk with children about the strategies they have used to solve a problem. Spot opportunities to playfully pose composition problems for children to explore. • Discuss the order of numbers in context, e.g. finding a page number. • Enjoy subitising games and sustained shared thinking about number, indoors and outdoors. • Encourage cardinal counting by saying how many there are after counting (*…6, 7, 8. There are 8 balls*). • In everyday activities, ask children to count out a number of things from a group (e.g. *Could you get seven cups for snacktime?*) • Encourage children to make predictions and visualise the outcome in stories, rhymes and songs if one (or two) is added or taken away. • Talk to children about the marks and signs they use to represent and communicate their thinking. As appropriate, model and discuss informal and standard ways (e.g. using arrows, plus and minus signs). • Begin to model calculations in mathematical stories and number rhymes and in real contexts, using a range of ways of representing (e.g. five-frames). Use both informal and standard ways to record these, including tallies and symbols. Discuss children's own graphical strategies to solve problems, using some vocabulary of addition and subtraction.	• Involve children in voting, e.g. for books to read at story time, using linking cubes with children's names on. • Discuss examples and display large numbers including hundreds, thousands and a million. • Jump with children along a number track, counting each jump or counting on. • Sing counting songs and count together forwards and backwards, sometimes starting from different numbers and in different step sizes. Discuss numbers coming *before*, *after* and *between* and stress patterns. • Plan opportunities to order mixed-up numerals. • When counting groups as part of routines, e.g. self-registration with ten-frames, dinner chart etc,. record the final total as a label for children to see. • Subitise with children, talking about how they see numbers of things made up in a variety of arrangements (e.g. recognising odd and even numbers). • Pose everyday estimation problems and establish mental estimation benchmarks, e.g. more or less than 10. • Set up an estimation station where everyone records guesses; later count and order the guesses. • Build counting and ways of representing numbers into everyday routines. • Provide numeral cards for children to order on a washing line. • Play subitising games which involve quickly revealing and hiding numbers of objects, perhaps showing numeral cards and fingers. • Drop marbles into a tin and ask the children to listen (without looking) to count how many there are. • Provide opportunities for children to match a number of objects to the numeral, including zero, and display number lines to 100 at child height. • Provide dice, board and card games, sometimes involving older children, families and members of the local community. • Provide resources to make "staircase" patterns which show that the next counting number includes the previous number plus one. • Display children's mathematical representations, including explanations of the children's meaning making.
RANGE 6 **Comparison** • Uses number names and symbols when comparing numbers, showing interest in large numbers • Estimates of numbers of things, showing understanding of relative size **Counting** • Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0 • Increasingly confident at putting numerals in order 0 to 10 (ordinality) **Cardinality** • Engages in subitising numbers to four and maybe five • Counts out up to 10 objects from a larger group • Matches the numeral with a group of items to show how many there are (up to 10) **Composition** • Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects • Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three • In practical activities, adds one and subtracts one with numbers to 10 • Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-"		

Mathematics

A Unique Child: what a child might be doing	Positive Relationships: what adults might do	Enabling Environments: what adults might provide
RANGE 6 (cont.)		
Spatial Awareness • Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints • Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning) • May enjoy making simple maps of familiar and imaginative environments, with landmarks	• Encourage the use of relative terms (*in front of, behind, before and after, in a line, next to and between).* • Encourage children to explore what can be seen from different viewpoints. • Encourage children to describe position and give directions in play and in everyday routines. • Encourage children to create scaled-down models such as in small world play. • When children are fitting shapes into an outline or making a model from a 2D picture, help them to select more spatially challenging activities. • Encourage children to make maps of routes they have walked or travelled in some way.	• Play barrier games (where players have an identical set of objects which are hidden from each other; one player makes an arrangement of objects and gives instructions to the other to try to make the same arrangement). • Plan opportunities for children to describe and recall familiar routes. • Engage families in taking photos of familiar things from different viewpoints.
Shape • Uses informal language and analogies, (e.g. *heart-shaped and hand-shaped leaves*), as well as mathematical terms to describe shapes • Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes • Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build	• Encourage children to use the names of shapes and their properties (e.g. *straight, curved, edges*) and prompt them to say what shapes remind them of. • Discuss different examples of the same shape (e.g. equilateral and right-angled triangles) in a variety of orientations. • Take opportunities to discuss the shapes that children paint, draw and collage and shapes noticed in their local environment using regular shapes and shapes with no name. • When acting out their own stories encourage children to make the shapes involved on their own or with others. • When constructing, sensitively discuss which shapes make other shapes (e.g. triangles making rectangles and hexagons with pattern blocks or mosaic tiles). • Challenge children to make more complex constructions such as towers of arches, a window or a staircase.	• Provide resources for shape play including unit blocks, pattern blocks, mosaic tiles and jigsaw puzzles with different levels of challenge. • Teach strategies for solving shape and jigsaw puzzles, describing shape properties and modelling the mathematical vocabulary such as *straight, corner, edges.* • Play games focussing on the properties of shapes, such as hiding and partially revealing a shape, asking children to say what different shapes it could be or not, and why.
Pattern • Spots patterns in the environment, beginning to identify the pattern "rule" • Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat	• Encourage children to notice and appreciate a range of patterns involving repetition and symmetry in the environment, including traditional patterns from a range of cultures. • Model using symbols to represent a pattern in other ways (e.g. using a spot/cross/dash pattern of symbols and doing a twirl/jump/glide in response). • Make deliberate mistakes when creating patterns alongside children and playfully challenge them to fix the problem. • Make border patterns where the repeating pattern continues around an object or frame.	• Provide opportunities for printing patterns using a variety of objects. • Using photos, challenge children to copy and continue patterns. • Invite children to create a pattern with the same structure using different objects (e.g. instead of a red/blue/blue pattern, create a sheep/cow/cow pattern).

Mathematics

A Unique Child: what a child might be doing	Positive Relationships: what adults might do	Enabling Environments: what adults might provide
RANGE 6 (cont.)  **Measures** • Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy • Becomes familiar with measuring tools in everyday experiences and play • Is increasingly able to order and sequence events using everyday language related to time • Beginning to experience measuring time with timers and calendars	• When comparing the length, weight and capacity of things in play and everyday activities, encourage children to predict and give reasons. • Discuss accuracy, for instance matching ends or starting points, balancing exactly or "fullness". • Support timed challenges by timing runs, trails, obstacle courses, etc. and teach children how to use the stopwatch. • Discuss the order and sequence of events in routines and role play using the language of time (*first, then, after, before, next, sooner, later*). • Draw children's attention to visual timetables and clock times, focusing on the hour hand.	• Have areas where children can explore the properties of objects, compare lengths, weigh and measure. • Provide objects in a range of contexts varying in length, capacity or weight, including tall thin, short fat, large light and small heavy things. • Provide pictorial sequences for instructions. • Model using measuring tools including height charts, rulers, tape-measures, scales and timers. • Sing songs about the days of the week and months of the year, referring to a calendar. Countdown to events.

Statutory ELG: Number

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the 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.

Statutory ELG: Numerical Patterns

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 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.

Statutory ELG: Mathematics

In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.