

Phase 1 - Maths

	Autumn 1- Fundamentals of Mathematics	Autumn 2- Patterns & Position/direction	Spring 1- Number	Spring 2- Shape	Summer 1- Number	Summer 2- Measure
Planned PFA Links and Cultural Capital Opportunities	Numeracy- recognising & writing numbers.	Following instructions Understanding directions Play opportunities- creating patterns: in Forest school, from natural materials, in class, in the playground.	Numeracy- recognising & writing numbers.	Play opportunities- to build using a range of building blocks and shapes	Numeracy- recognising & writing numbers. Role play opportunities- shop set up in the classroom.	Play opportunities- to measure capacity through a range of sand and water play.
Planned Reading Opportunities	Ten in the bed Spot can count Ten little aliens Counting rhymes	A very hungry caterpillar	Handa's Hen Ten friendly fish	Round is a mooncake Brown Rabbit's shapes The shape of my heart	One is a snail, ten is a crab On the launch pad 1 to 20 Animals Aplenty	Goldilocks and the three bears Jack and the beanstalk The enormous turnip
Notes for topics	Number to be repeated throughout the year, work through in order.		Number to be repeated throughout the year, work through in order.		Number to be repeated throughout the year, work through in order.	
Planned Key Vocabulary (Topic specific)	Number Organise, categorise, separate, groups, same, different, similarities, differences, counting, give me, sequence, more, less, a lot, added, taken away, number names: zero, one, two, three, four, five, six, seven, eight, nine, ten, quantity, how many, formation, mark making.	Patterns: Pattern, repeating, pictures, symbols, stripes, spots, first, then, next, again, same, different. Positional language: above, below, under, on, left, right, straight, behind, top, bottom, front, near, outside, inside, up, down, in, out.	Number Organise, categorise, separate, groups, same, different, similarities, differences, counting, give me, sequence, more, less, a lot, added, taken away, number names: zero, one, two, three, four, five, six, seven, eight, nine, ten, quantity, how many, formation, mark making, total, age, birthday, numeral.	Shape Shapes, jigsaws, fit, space, 2D, flat, 3D, solid, square, circle, triangle, rectangle, round, tall, thin, small, big, large, structure, building, blocks, construction, tall, environment, wheels, windows, doors, signs etc,	Number Organise, categorise, separate, groups, same, different, similarities, differences, counting, give me, sequence, more, less, fewer, a lot, added, taken away, quantity, number names zero to twenty, addition, plus, add, sum, subtraction, subtract, take-away, minus, total, equals, altogether, double, lots of, half, share, divide,	Measure Size, large, big, small, little, Capacity, full, empty, half-full, half-empty, container, Weight, heavy, light, heavier, lighter, weigh, Length, Height, long, short, longer, shorted measure, compare

Number

Subitising

- React to changes of amount in a group of up to three items.
- Fast recognition of up to 3 objects, without having to count them individually ('subitising').
- Subitise smaller parts within a whole group of up to five objects.
- Subitises two or more parts within a larger group of more than five objects, but does not see the whole.
- Subitises two or more parts within a larger group and instantly knows the total (up to ten).
- Can select objects from a larger group by subitising e.g. groups of two.
- Subitises up to five, including regular and random arrangements of up to five objects, by seeing the parts, and quickly knowing the whole.
- Can recognise small quantities in familiar patterns e.g. up to six on a dice, without counting.
- Can use visual models to explore different compositions to ten.
- Can see two parts within a whole of up to ten pictures or objects.
- Subitises beyond 5, including regular and random arrangements of up to five objects.

Counting & recognising number

- Take part in finger rhymes with numbers.
- Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.
- Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.'
- Experiment with their own symbols and marks to represent number.
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Using concrete items, can find different combinations of three, recognising the total is the same.
- Recite numbers past 5.
- Begin to develop one-to-one correspondence and say one number name for each object.
- Compare amounts, saying 'lots', 'more' or 'same'.
- Moves and touches items to count the reliably.
- Compare quantities using language: 'more than', 'fewer than'.
- Say one number for each item in order: 1,2,3,4,5.
- Say one number for each item in order, up to 10.
- Link the number symbol (numeral) with its cardinal number value.
- Show 'finger numbers' up to 5, all at once, without counting.
- Experiments to represent number using some numerals.
- Can recognise numerals 0-5 when they are placed in order, such as on a number line.
- Can recognise numerals 0-10 when they are placed in order, such as on a number line.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Link numerals and amount for example, showing the right number of objects to match the numeral, up to 10.
- Can order numerals 0-5.
- Solve real world mathematical problems with numbers up to 5.
- Can order numerals 0-10.
- Count beyond ten.
- Can count on, when not starting at zero.
- Can count beyond 20.
- Compare numbers.
- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Arrange small quantities into pairs and notice that some quantities will have an odd one left over.
- Can recall odd and even numbers to ten
- Explore the composition of numbers to 10.
- Automatically recall number bonds for numbers 0-5.
- Can identify the missing number from number bonds to ten, using concrete objects or their fingers.
- Automatically recall number bonds for numbers 0-10.
- Count objects, actions and sounds.
- Compare sets of objects, saying when they have the same number.

	<ul style="list-style-type: none"> • Compare sets of objects, saying which one has more objects. • Compare sets of objects, saying which one has less objects. • Can count things they cannot touch, abstraction principle. <p>Part/whole and sharing</p> <ul style="list-style-type: none"> • Beginning to understand fair and unfair e.g. when snacks are shared between them. • Can share fairly through practical activities such as putting food on plates. • Shows an understanding of parts and whole e.g. gathering objects and separating into smaller groups. • Understands that the 'whole' is made up of parts. • Understands the language of 'part' and 'whole'. • Use the vocabulary of sharing such as 'equal groups', 'sharing fairly', 'share between' and 'fair/unfair'. • Aware, when sharing, original quantity remains unchanged, but has been shared.
<p>Addition & Subtraction</p>	<p>Addition</p> <ul style="list-style-type: none"> • Find one more than a given number from 1-10. • Say the number that is one more than a given number. • Find the total number of items in two groups by counting all of them. • Select two groups of objects to make a given total of objects. • Understands the effect of adding 'zero'. • Count on to add one number to another. • Understands addition as an increase. • Use vocabulary of addition: altogether, plus, more. • Use vocabulary of equals: makes, balances, same, total. <p>Subtraction</p> <ul style="list-style-type: none"> • Find one less than a number from one to ten. • Subtract by counting a group of objects, counting out the number to remove and recounting. • Understand the effect of subtracting zero. • Understanding the effect of subtracting the full amount. • Count back to subtract. • Understands subtraction as a decrease. • Use vocabulary of subtraction: take away, how many left, subtract, minus. • Can use their understanding of number bonds to recall number bonds to five subtraction facts. <p>Doubles</p> <ul style="list-style-type: none"> • Beginning to use the word double. • Can recognise dice doubles. • Can recall double facts to five. • Can recall double facts to ten. • Can make and explain their own doubles. • Can calculate doubles when working practically with concrete resources.
<p>Patterns & Position/ Direction</p>	<ul style="list-style-type: none"> • Notice patterns and arrange things in patterns. • Talk about the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. • Identifies the patterns around them. Uses informal language like 'pointy', 'spotty', 'blobs' etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern. • Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' • Continue repeating patterns. • Copy repeating patterns. • Create repeating patterns. • Understand position through words alone – for example, "The bag is under the table," – with no pointing.

	<ul style="list-style-type: none"> • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'.
Shape	<ul style="list-style-type: none"> • Climb and squeezing selves into different types of spaces. • Build with a range of resources. • Complete inset puzzles. • Talk about and explore 2D (for example, circles, rectangles, triangles) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. • Talk about and explore 3D shapes (for example, cubes, cuboids, pyramid) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. • Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. • Combine shapes to make new ones – an arch, a bigger triangle etc. • Name a range of 2D shapes including circle, square, triangle and rectangle. . • Select, rotate and manipulate shapes in order to develop spatial reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
Measure	<ul style="list-style-type: none"> • Compare sizes, using gesture and language - 'bigger/little/smaller • Compare weights using gesture and language - 'heavy/light'. • Compare heights, using gesture and language - 'tall/short/high/low'. • Compare length, using gesture and language - 'long/short'. • Compare capacity, using gestures and language- 'full/empty'. • Make comparisons between 2 objects relating to size by saying which one is bigger/smaller. • Make comparisons between 2 objects relating to length by saying which one is longer/shorter. • Make comparisons between 2 objects relating to weight by saying which one is heavier/lighter. • Make comparisons between 2 containers relating to capacity by saying which one has more/less. • Compare size by putting 3 objects in order according to their size. • Compare length by putting 3 objects in order according to their length or height. • Compare weight by putting 3 objects in order according to their weight. • Compare capacity by putting 3 containers in order according to their capacity.