EYFS Yearly Overview
Maths

	Half Term 1	Half Term 2
Autumn	**Getting to Know You** Complete the Reception Baseline Assessment (RBA) Opportunities for settling in, introducing the areas of provision and getting to know the children. **Just Like Me!** **Match and Sort** To find and match objects that are the same. To sort objects into sets based on attributes such as colour, size or shape. **Compare Amounts** To compare and order sets of objects – which has more, which has less, which is the same? **Compare Size, Mass and Capacity** To compare and order objects according to their size (opportunities to explore mass and capacity will be available in the provision) **Exploring Pattern** To be able to copy, continue and create their own simple repeating patterns, for example, tap your knees, clap, tap your knees, clap	**It's Me 1,2,3!** **Place Value – Representing numbers to 3** To recognise up to 3 objects quickly, without having to count them individually. To say one number for each item in order: 1,2,3,4,5 To know that the last number reached when counting a small set of objects tells you how many there are in total. To show 'finger numbers' up to 3. To link numerals and amounts (e.g. matching 3 objects to numeral 3) To experiment with their own symbols and marks as well as numerals. To compare numbers up to 3. To solve real world mathematical problems with numbers up to 3. To compare quantities using language: 'more than', 'fewer than'. To understand the 'one more than/one less than' relationship between consecutive numbers. **Shape (Circles and Triangles)** To talk about and explore circles and triangles using informal and mathematical language e.g. 'sides', 'vertices', 'straight', 'flat', 'round'. To select shapes appropriately e.g. flat surfaces for building, a triangle for a roof To combine shapes to make new ones, e.g. an arch, a bigger triangle etc. *To recognise shapes on everyday items in the classroom and outside.* *To identify and name a wider range of 2D shapes (GD)* **Positional Language** To understand position through words alone – for example, 'The bag is under the table,' – with no pointing. To describe a familiar route. To discuss routes and locations, using words like 'in front of' and 'behind'. *To begin to use positional language to describe how items are positioned in relation to others.* *To create a map to represent the models that they build, familiar places and places in stories.* *To follow instructions using extended positional language, such as beside, between, above, below, next to (GD)* *To follow a simple map (GD)*

		To use a map to build different constructions e.g. an obstacle course (GD) **Light and Dark** **Place Value – Representing numbers to 5** To recognise up to 5 objects quickly, without having to count them individually. To say one number for each item in order: 1,2,3,4,5 To know that the last number reached when counting a small set of objects tells you how many there are in total. To show 'finger numbers' up to 5. To link numerals and amounts (e.g. matching 5 objects to numeral 5) To experiment with their own symbols and marks as well as numerals. To compare numbers up to 5. To solve real world mathematical problems with numbers up to 5. To compare quantities using language: 'more than', 'fewer than'. To understand the 'one more than/one less than' relationship between consecutive numbers. **Shape (Shapes with 4 sides)** To talk about and explore shapes with 4 sides using informal and mathematical language e.g. 'sides', 'corners', 'straight', 'flat'. To select shapes appropriately e.g. flat surfaces for building, a square for robot's body To combine shapes to make new ones, e.g. an arch, a bigger triangle etc. *To recognise shapes on everyday items in the classroom and outside.* *To name a range of 2D shapes and talk about their properties using a wider range of mathematical vocabulary, e.g. 4 straight sides, curved edge.* *To identify and name a wider range of 2D shapes (GD)* **Time- Night and Day** *To order key events in their daily routines and use key language to describe when events happen, such as yesterday, today and tomorrow.* *To begin to measure time in simple ways e.g. how many sleeps until an important event.* *To know the days of the week and recite them in the correct order.* *To explore the measurement of time, e.g. how many goals can we score in a minute, or using a timer to measure how long it takes to complete a task (GD)* *To know the months of the year and recite them in the correct order (GD)*

	What can make this personal to Dovers Green? Big Maths – exploring maths on a large scale in the hall Outdoor Provision – exploring concepts through our play, and interacting with adults Forest School – exploring concepts in nature Use of natural resources, such as conkers	
Spring	**Alive in 5!** **Addition and Subtraction (Numbers to 5)** *To understand that all numbers are made up of smaller numbers.* *To combine two groups to find out how many are there altogether.* *To understand that the quantity of a group can be changed by taking items away.* To explore the composition of numbers to 5. To automatically recall bonds up to 5 (including subtraction facts). To understand the meaning of 'zero', which represents 'nothing there' or 'all gone'. **Measure** To make comparisons between objects relating to weight and capacity. To compare weight and capacity. *To use everyday language relating to weight and capacity (e.g. full, empty, long, short, heavy & light).* *To compare objects directly, using language such as heavier than, heaviest, equal to.* *To measure weight and capacity using different objects.* *To understand and explain that the biggest items are not always the heaviest, and the tallest containers do not necessarily hold the most (GD)* **Growing 6,7,8** **Number & Place Value (Numbers to 8)** To count objects, actions and sounds to 8. To be able to subitise numbers to 8. To link the number symbol with its cardinal number value. To compare numbers to 8 To understand the 'one more than/one less than' relationship between consecutive numbers. **Measure** To make comparisons between objects relating to length and height. To compare length and height. *To use everyday language relating to length and height (longer, taller, shorter, wider, narrower).*	**Building 9 and 10** **Number & Place Value (Numbers to 10)** To count objects, actions and sounds to 10. To be able to subitise numbers to 10. To link the number symbol with its cardinal number value. To compare numbers to 10. To understand the 'one more than/one less than' relationship between consecutive numbers. **Addition and Subtraction (Numbers to 10)** *To understand that all numbers are made up of smaller numbers.* *To combine two groups to find out how many are there altogether.* *To understand that the quantity of a group can be changed by taking items away.* To explore the composition of numbers to 10. To automatically recall number bonds up to 10. (including subtraction facts to 5). **Shape (3D Shapes)** To talk about and explore 3D shapes using informal and mathematical language e.g. 'sides', 'vertices', 'straight', 'flat', 'round'. To select shapes appropriately e.g. flat surfaces for building, a triangular prism for a roof. To combine shapes to make new ones, e.g. an arch, a bigger triangle etc. To select, rotate and manipulate shapes in order to develop spatial reasoning skills. To compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. *To recognise shapes on everyday items in the classroom and outside.* *To identify and name several 3D shapes, including cuboid, cone and cylinder (GD)* **Patterns** To talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. To extend and create ABAB patterns – stick, leaf, stick, leaf. To notice and correct an error in a repeating pattern.

	To measure length and height using different objects, such as cubes, hands, strides etc. *To understand the language associated with measure, so that they can follow instructions, e.g. Who has thrown their beanbag the furthest? (GD)* **Time** To begin to describe a sequence of events, real or fictional, using words such as 'first', 'then…'. *To order key events in their daily routines and use key language to describe when events happen, such as yesterday, today and tomorrow.* *To begin to measure time in simple ways e.g. how many sleeps until an important event.* *To know the days of the week and recite them in the correct order.* *To know the month of their birthday.* *To explore the measurement of time, e.g. how many goals can we score in a minute, or using a timer to measure how long it takes to complete a task (GD)* *To know the months of the year and recite them in the correct order (GD)*	
	What can make this personal to Dovers Green? Big Maths – exploring maths on a large scale in the hall Outdoor Provision – exploring concepts through our play, and interacting with adults Forest School – exploring concepts in nature Shape Scavenger hunt	

Summer	**To 20 and beyond** **Number & Place Value (Numbers to 20)** *To recognise and order numbers 11-20.* *To estimate a number of objects and check by counting.* To explore the composition of numbers to 20. To begin to understand the pattern of numbers to 20. **Spatial Reasoning** To select, rotate and manipulate shapes in order to develop spatial reasoning skills. To compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. **First Then Now** **Addition & Subtraction** *To understand that all numbers are made up of smaller numbers.* *To combine two groups to find out how many are there altogether.* *To understand that the quantity of a group can be changed by taking items away.* To be able to add numbers together and take numbers away. *To use the addition, subtraction and equals symbols, when recording number sentences (GD)* *To recall all number bonds to 10 (GD)* **Spatial Reasoning** To select, rotate and manipulate shapes in order to develop spatial reasoning skills. To compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. To understand that shapes can be combined and separated to make new shapes.	**Find My Pattern** **Multiplication & Division** To understand that some quantities can be grouped into pairs and some will have one left over, and to begin to understand the pattern of odd and even numbers. To recognise and make equal groups, checking to make sure that they are the same. *To know that double means 'twice as many'.* *To form numbers correctly* *To be able to count in 2s to 20, 5s to 50 and 10s to 100 (GD)* *To be able to explain the difference between odd and even numbers (GD)* *To solve practical problems that involve combining groups of 2, 5, and 10 or sharing into equal groups (GD).* *To know double facts for each number to 10 (GD)* **Spatial Reasoning** To understand that shapes can be combined and separated to make new shapes. To be able to use mathematical language to describe how to replicated a model or picture. **On the Move** **Deepening Understanding** To apply their skills and knowledge so that they can solve problems, for example, there are 4 people on a boat, how many legs are there altogether? **Patterns and Relationships** To explore and investigate the relationship between patterns and shapes, for example, to continue to a repeating pattern, or to identify a pattern in a story. **Spatial Reasoning – Mapping** To be able to draw a simple map and use positional language to describe where objects are in relation to other objects, for example, describing a route for Little Red Riding Hood to get to Grandma's house.

Early Learning Goal: Number

Children will:

- have a deep understanding of number to 10, including the composition of each number.
- 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.
- subitise (recognise quantities without counting) up to 5.

Early Learning Goal: Numerical Pattern

Children will:

- compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- verbally count beyond 20, recognising the pattern of the counting system.
- explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

What can make this personal to Dovers Green?
Big Maths – exploring maths on a large scale in the hall
Outdoor Provision – exploring concepts through our play, and interacting with adults
Forest School – exploring concepts in nature
To create repeating patterns using natural materials

The development of SMSC and the promotion of British Values within Maths	
SMSC	**Spiritual** The study of mathematics enables children to make sense of the world around them and we strive to provide opportunities for the children to explore the connections between their numeracy skills and every-day life. Developing deep thinking and an ability to question the way in which the world works promotes their spiritual growth. Children are encouraged to identify sequences and patterns both in the man-made and the natural world and to use maths as a tool to explore it more fully. **Moral** The moral development of children is an important thread running through the mathematics curriculum. Children are provided with opportunities to use their maths skills in real life contexts, applying and exploring the skills required in solving various problems. All children are made aware of the fact that the choices they make lead to various consequences. The retrieval strategies which have been implemented encourage the children to make a choice that relates to the result they are looking for eg Odd One Out, True/False, Talk Like an Expert. **Social** Problem solving skills and teamwork are fundamental to mathematics through creative thinking, discussion, explaining and presenting ideas. Children are always encouraged to explain concepts to each other and support each other in their learning. In this manner, children

	realise their own strengths and feel a sense of achievement which often boosts confidence. Over time they become more independent and resilient learners. **Cultural** Understanding and appreciating personal influences: taking into account other people's views and understanding how to express own views. Eg. How to explain to someone where they may have gone wrong in a question.
British Values	**Democracy;** take into account the views of others when working together to solve a problem. **Rule of Law;** undertake safe practices, following class rules during tasks and activities for the benefit of all. Understand the consequences if rules are not followed. **Respect and Tolerance of different faiths;** Use maths to learn about different faiths and cultures around the world. **Individual Liberty;** children to develop self-knowledge, self-esteem and increase confidence in their own abilities by giving children extensive opportunities to investigate, explore and reason mathematical concepts. Work within boundaries to make safe choices during practical activities. **Mutual Respect:** Children to work collaboratively to listen to each other's opinions and to share equipment. Children to discuss different mathematical strategies used to solve a problem and offer help to their peers.