

## Year 1 Yearly Overview Maths

		Half term 1	Half term 2
Autumn	<b>Place Value (within 10)</b>	<p>Count to and across 100, forwards and backwards, beginning with 0 or 1, from any given number.</p> <p>Count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens.</p> <p>Identify one more or one less than any given number.</p> <p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</p> <p>Read and write numbers from 1 to 20 numerals and words.</p>	<b>Addition &amp; Subtraction (within 10)</b>
	<b>Addition (within 10)</b>	<p>Read, write and interpret mathematical statements involving addition (+), equals (=) signs.</p> <p>Add and subtract one-digit and two digit numbers to 10, including zero.</p> <p>Solve one-step problems that involve addition using concrete objects and pictorial representations.</p> <p>Recall number bonds to 10.</p>	<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</p> <p>Represent and use number bonds and related subtraction facts within 10.</p> <p>Add and subtract one-digit and two digit numbers to 10, including zero.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, e.g. <math>7 = ? - 9</math>.</p> <p>Recall number bonds to 10.</p> <p>Double numbers to 10.</p>
	<b>What can make this personal to Dovers Green?</b>	<p>Active maths- use of number snake and hundred square on the school playground</p> <p>Simple addition/subtraction of natural objects in Forest School</p> <p>Half termly maths investigations</p>	<p><b>Shape</b></p> <p>Recognise and name common 2-D shapes, including: (e.g. rectangles, (including squares), circles and triangles).</p> <p>To recognise and name common 3-D shapes, including: (e.g. cuboids (including cubes), pyramids and spheres).</p> <p><i>Name and describe some properties of 2D and 3D shapes (GD)</i></p> <p><b>What can make this personal to Dovers Green?</b></p> <p>Half termly maths investigations</p> <p>Shape scavenger hunt- (use binoculars to bring it to life!)</p>

## Place Value (within 20)

Count to and across 20, forwards and backwards, beginning with 0 or 1, from any given number.

Count, read and write numbers to 20 in numerals, count in multiples of twos, fives and tens.

Identify one more or one less than within 20.

Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.

Read and write numbers from 1 to 20 numerals and words.

*Partition two digit numbers into tens and ones, explaining their thinking verbally, in pictures or using apparatus.*

*Count forwards and backwards in 10s, from any number, up to 100.*

## Addition & Subtraction (within 20)

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.

Represent and use number bonds and related subtraction facts within 20.

Add and subtract one-digit and two digit numbers to 20, including zero.

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, e.g.  $2 + \_ = 20$

*To be able to quickly recall number bonds to 10.*

*To double numbers to 20.*

### What can make this personal to Dovers Green?

Adding/subtracting natural resources in outdoor area/ Forest School  
Half termly maths investigations

## Place Value (within 50)

Count to and across 50, forwards and backwards, beginning with 0 or 1.

Count, read and write numbers to 50 in numerals, count in multiples of twos, fives and tens. Identify one more or one less than any number to 50.

Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.

Read and write numbers from 1 to 20 numerals and words.

*Partition two digit numbers into tens and ones, explaining their thinking verbally, in pictures or using apparatus.*

## Length, Height, Weight and Volume

Compare, describe and solve practical problems for:

- Lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)
- Mass/weight (e.g. heavy/light, heavier than, lighter than)
- Capacity/volume (e.g. full/empty, more than, less than, half, half full, quarter)

Measure and begin to record lengths and heights, mass/weight and capacity/ volume.

*Use the language of measurement when solving simple problems (language as above).*

*Have an awareness about the standard units of measures, for example, cm, metres (GD)*

## CONSOLIDATION

### What can make this personal to Dovers Green?

Outdoor maths -Explore measure in the outdoor learning provision- sand, water, giant scales etc

Half termly maths investigations- measure distance car has travelled, compare weights of real life objects.

## Multiplication and Division

Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

*Know the multiples of 2, 5 and 10 up to 100 (GD)*

*Use their knowledge of 2s, 5s, and 10s, to solve problems mentally (GD)*

*Count forwards and backwards beyond 100 in 2s, 5s and 10s (GD)*

*Use reasoning about numbers and relationships to solve more complex problems and explain their thinking (GD)*

## Fractions

Recognise, find and name a half as one of two equal parts of an object, shape or quantity.

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

*Solve simple problems using halves and quarters, in various contexts, using reasoning (GD)*

## Position and Direction

Describe position, direction and movement, including whole, half, quarter and three-quarter turns.

*Plan a short route using simple commands and vocabulary related to position and direction (GD)*

### What can make this personal to Dovers Green?

Half termly maths investigations

Finding half and quarter of chalk objects on the playground.

Real life problem solving- dividing seeds between pots for planting seeds in allotment, identifying fractions of a pizza/ cake.

## Place Value (within 100)

Count to and across 100, forwards and backwards, beginning with 0 or 1, from any given number.

Count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens.

Identify one more or one less than any given number.

Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.

Read and write numbers from 1 to 20 numerals and words.

*Partition two digit numbers into tens and ones, explaining their thinking verbally, in pictures or using apparatus.*

*Count forwards and backwards in 10s, from any number, up to 100.*

## Time

Compare, describe and solve practical problems for time (quicker, slower, earlier, later)

Measure and begin to record time (hours, minutes, seconds)

Sequence events in chronological order using language, (for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening).

Recognise and use language relating to dates, including days of the week, weeks, months and years.

Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

## Money

To recognise and know the value of different denominations of coins and notes.

*To know and be able to sequence the value of each coin.*

To begin to use different coins to make a given amount (GD)

### What can make this personal to Dovers Green?

Make clocks in Forest School- can they make o'clock and half past. Peers to guess time.

Half termly maths investigation- coins to pay for items in a shop.

## 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. For example, children learn the value of each coin and then use this knowledge to add up the coins required to pay for a given item. 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, Sometimes/ Always/ Never questions.

#### **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.