

Pen-y-ghent Planning Overview 2022-23

	Mathematics Curriculum – Year 2 Autumn			
Unit:	Place Value	Number: Addition and Subtraction	Money	Multiplication and division
Term:	Autumn 1: 3 Weeks	Autumn 1: 5 Weeks	Autumn 2: 2 Weeks	Autumn 2: 1 Week
What We Will Learn	Pupils are building on prior knowledge they will practice counting forwards and backwards by introducing teen numbers.	Pupils will explore addition by counting on from a given number. They will learn to understand that addition is commutative and that it is more efficient to start from the largest number. They will learn how to partition two digit numbers and this will support further learning within subtraction and crossing the ten barrier.	Pupils will bring pounds and pence together they will continue to use pounds and pence to embed prior learning. Pupils will be able to recognise that one note may be worth many times the value of another note.	Pupils will focus on finding equal groups, 5, 10 and explore this within 50. Pupils will link their counting with real life experiences.
What We Will Do	Count in steps of 2, 3 and 5 from 0 and in tens from any number, forward and backward. Recognise the place value of each digit in a two digit number (tens, ones) Identify, represent and estimate numbers to 100 using different representations including the number line. Compare and order numbers from 0 up to 100; use and = signs. Read and write numbers to at least 100 in numerals and words.	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two digit number and ones; a two digit number and tens; two two digit numbers; adding three one digit numbers. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.	Recognise and use symbols of pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Skills Learned	Pupils will have built on their knowledge of the number system by being able to read and write numbers to 100	Pupils will further develop their partitioning skills they will recognise the difference between one digit and two digit numbers and be able to line them up in columns.	Pupils will build on prior knowledge and will learn a symbol for a pound £ and that notes can represent many pounds.	Pupils will build on prior knowledge and will learn to identify the difference between columns and rows.

Pen-y-ghent Planning Overview 2022-23

Mathematics Curriculum – Year 2 Spring				
Unit:	Multiplication and division	Statistics	Properties of shape	Number: Fractions
Term:	Spring 1: 4 Weeks	Spring 1: 2 Weeks	Spring 2: 3 Weeks	Spring 2: 3 Weeks
What We Will Learn	Pupils will practice their 2, 5, 10 times tables recall facts, they will learn about groups and understand the importance of the word 'equal/unequal' and know which groups are equal and unequal, and why they are equal or unequal. Pupils will be exposed to numerals and words, as well as multiple representations.	Pupils are introduced to different ways to record data, they will find out about tally charts as a systematic method of recording data. They will use their knowledge of the 5X table to be able to interpret a tally chart. Pupils will use tally charts to produce pictograms. They build pictograms using concrete apparatus such as counters or cubes then move to drawing their own pictures. Pupils will then use their knowledge of number lines to produce a block diagram by reading the scale on the chart and work out what each block represents.	Pupils will need to recognise 2-D shapes in different orientations and proportions. Pupils will be encouraged to develop strategies for accurate counting of sides, such as marking each side as it has been counted. Pupils also need to understand that not all same-sided shapes look the same, such as irregular 2-D shapes. Pupils will use a range of practical resources (mirrors, geoboards, paper folding) to explore shapes being halved along their vertical line of symmetry.	Pupils will learn to understand the concept of a whole as being one object or one quantity. Pupils explore making and recognising equal and unequal parts. They will do this using both real life objects and pictorial representations of a variety of shapes and quantities. They will be introduced to the notion $\frac{1}{2}$ for the first time and they will use this alongside sentences half/halves.
What We Will Do	Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask+ answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data	Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. Compare and sort common 2D and 3D shapes and everyday objects. Order and arrange combinations of mathematical objects in patterns and sequences. Pupils will check for line of symmetry.	Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity. Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
Skills Learned	Pupils will increase their knowledge to interpret mathematical stories and create their own involving multiplication.	Pupils will develop the understanding of patterns and relationships, including sorting and categorising.	Pupils will learn how to differentiate between objects. In order to memorise how shapes are different from one another, they'll learn to pay attention to the little details that distinguish shapes.	Pupils will further develop their knowledge of number by using the mathematical language of numerator, denominator and what these represent.

Pen-y-ghent Planning Overview 2022-23

Mathematics Curriculum – Year 2 Summer					
Unit:	Length and Height	Position and direction	Consolidation – Pre SATS	Time	Mass and capacity
Term:	Summer 1: 2 Weeks	Summer 1: 2 Weeks	Summer 1: 2 Weeks	Summer 2: 2 Weeks	Summer 2: 3 Weeks
What We Will Learn	Pupil will be taught to use and understand the language of length such as long, longer, short, shorter, tall, and taller. They will recognise that the language will change depending on what type of length they are describing and comparing. Pupils will be taught that height is a type of length. They will also be exposed to lengths that are equal to one another	Pupils will practice the language 'left', 'right', 'forwards' and 'backwards' to describe position and direction. They will describe the position of objects and shapes from different starting positions. Through the use of board games such as Snakes and Ladders and Twister, they can explore positional language.		Pupils will learn all about time, they will learn the language of o'clock and understand the hour hand is the shorter hand and the minute hand is the longer hand. Pupils will learn how to read an analogue clock and will be given the opportunity to create times using individual clocks with moveable hands. They will explore seconds, minutes and hours and decide what is the best way to measure a unit of time?	Pupils will be introduced to weight and mass for the first time. Although they will already have some understanding of heavy and light from their own experience of carrying objects. Pupils will use vocabulary such as heavy, light, heavier than, lighter than before using the scales to check. Misconception should be explored the bigger the object does not always mean it is the heaviest.
What We Will Do	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) and mass (kg/g) to the nearest appropriate unit, using rulers and scales. Compare and order length and mass and record the results using >, < and =.	Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)	Consolidation & problem solving	Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. Know the number of minutes in an hour & the number of hours in a day. Compare and sequence intervals of time.	Choose and use appropriate standard units to estimate and measure capacity (l/ml) and temperature (°C) to the nearest appropriate unit, using thermometers and measuring vessels. Compare and order volume/capacity & record the results using >, < and =
Skills Learned	Pupils will build on prior knowledge of measuring length and height using non-standard units and apply this to measuring using a ruler.	Pupils will further develop their mathematical positional language and knowledge of movement and turns to be able to describe and record directions and being able to give simple directions.		Pupils will develop their knowledge of time and sequencing being able to identify a unit of time is "smaller", for example the concept of 60 minutes making up an hour and 24 hours in a day.	Pupils will build on prior knowledge of weight 'heavy and light' and will be able to learn how to read a standard unit of weight using a scale.