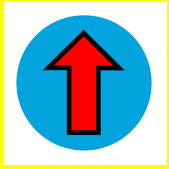
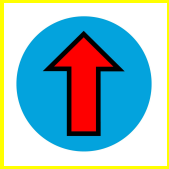
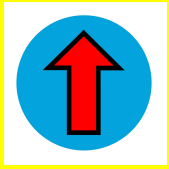
Maths Long Term Plan Hadrian Y1

Y1 Maths	
National Curriculum Objectives Year 1	Key Links
Pupils should be taught to: The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the 4 operations, including with practical resources [for example, concrete objects and measuring tools]. At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money. By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.	Year 1 – White Rose Maths Maths_guidance_year_1 (publishing.service.gov.uk) Mathematics programmes of study: key stages 1 and 2 (publishing.service.gov.uk) ActiveLearn: Home (activelearnprimary.co.uk)

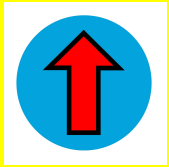
Topics		N.C Objectives	Small Steps	Key Vocab
Autumn 1 (within 10) Autumn 2 (within 20) Spring 1 (within 50) Summer 2 (within 100)	Number: Number and Place Value	Pupils should be taught to: • count to and across 100 • forwards and backwards, beginning with 0 or 1, or from any given number count • read and write numbers to 100 in numerals • count in multiples of twos, fives and tens giiven a number • identify one more and one less 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 in numerals and words.	• Sort/count/represent objects • count, read and write forwards/backwards from any number 0-10 • count one more/less • compare groups/numbers • introduce <, > and = • order numbers including using ordinal numbers • Introduce using number line	equal to more than less than (fewer) most least greatest smallest same different sort groups digit value
Progression 	EYFS: • Begin to develop a sense of the number system by verbally counting forward to and beyond 20, pausing at each multiple of 10. • Play games that involve moving along a numbered track, and understand that larger numbers are further along the track. • Distribute items fairly, for example, put 3 marbles in each bag. Recognise when items are distributed unfairly. Year 2: • Count through the number system. Place value within 100. Compare and order numbers. Add and subtract within 100 • Reason about the location of larger numbers within the linear number system. Compare and order numbers. Read scales. Begin to experience partitioning and combining numbers within 10. 1NF–1 Develop fluency in addition and subtraction facts within 10. • Add and subtract across 10. All future additive calculation. Add within a column during columnar addition when the column sums to less than 10 (no regrouping). Subtract within a column during columnar subtraction when the minuend of the column is larger than the subtrahend (no exchanging). • Recall the 2, 5 and 10 multiplication tables. Carry out repeated addition and multiplication of 2, 5, and 10, and divide by 2, 5 and 10. Identify multiples of 2, 5 and 10. Unitise in tens. Identify odd and even numbers.			
Teacher Subject Knowledge	Autumn 1& 2 ActiveLearn: Planning (activelearnprimary.co.uk)			

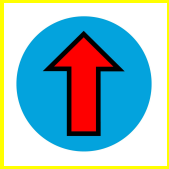
	Spring 1 ActiveLearn: Planning (activelearnprimary.co.uk) Summer 2 ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Science Geography History Computing DT Music			
Autumn 1 (within 10) Spring 1 (within 20)	Number: Addition and Subtraction	Pupils should be taught to: • read, 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 such as 7 = – 9	• part-whole model • additional symbol • fact families • number bonds within 10 with methods and comparisons • addition - adding together/more • finding part • subtraction symbol • subtraction - crossing out • subtraction - counting back • subtraction - breaking apart • Subtraction - finding the difference • comparing statements a + b < c, a + b < c + d	add plus subtract take away part whole first then now bar model equal to (=) fact families part-whole model number bond pattern digit more/greater less/smaller
Progression	EYFS: • Understand the cardinal value of number words, for example understanding that 'four' relates to 4 objects. Subitise for up to to 5 items. Automatically show a given number using fingers.			

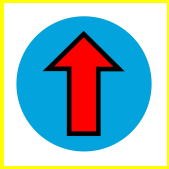
	• Devise and record number stories, using pictures, numbers and symbols (such as arrows). Year 2: • Add and subtract within 10. • Represent composition and decomposition of numbers using equations.			
Teacher Subject Knowledge 	Autumn 1: ActiveLearn: Planning (activelearnprimary.co.uk) Spring 2 - addition: ActiveLearn: Planning (activelearnprimary.co.uk) Spring 2 - subtraction: ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Science Computing History Geography			
Autumn 2 - Shape Summer 1 - Position and Direction	Geometry: Shape Geometry: Position and Direction	Pupils should be taught to: • recognise and name common 2-D and 3-D shapes, including: - 2-D shapes [for example, rectangles (including squares) circles and triangles] - 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. Pupils should be taught to: • describe position, direction and movement, including whole, half, quarter and threequarter turns.	• recognise and name 3d shapes • sort 3d shapes • recognise and name 2d shapes • sort 2d shapes • patterns with 3d and 2d shapes • describe turns • describe position	cube cylinder cuboid pyramid 2d 3d orientation face triangles squares rectangles circles surface

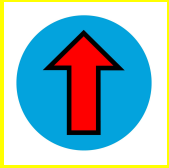
Progression 	EYFS: • See, explore and discuss models of common 2D and 3D shapes with varied dimensions and presented in different orientations (for example, triangles not always presented on their base). • Select, rotate and manipulate shapes for a particular purpose, for example: • rotating a cylinder so it can be used to build a tower • rotating a puzzle piece to fit in its place. Year 2: • Describe properties of shape. Categorise shapes. Identify similar shapes. • Find the area or volume of a compound shape by decomposing into constituent shapes. Rotate, translate and reflect 2D shapes. Identify congruent shapes.			
Teacher Subject Knowledge 	Shape: ActiveLearn: Planning (activelearnprimary.co.uk) Position and Direction: ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Computing Geography Science			
Spring 2	Measurement: Length and Height	Pupils should be taught to: • compare, describe and solve practical problems for: - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] • measure and begin to record the following: - lengths and heights	• compare length/heights • measure length	long/short longer/shorter tall/short length height double/half measure

Progression 	Year 2: • choose and use appropriate standard units to estimate and **measure length/height in any direction (m/cm)**; mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, **using rulers,** scales, thermometers and measuring vessels • **compare and order lengths,** mass, volume/capacity and record the results using >, < and =			
Teacher Subject Knowledge 	ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Science Geography Computing DT Art			
Spring 2	Measurement: Weight and Volume	Pupils should be taught to: • compare, describe and solve practical problems for: - mass/weight [for example, heavy/light, heavier than, lighter than] - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] • measure and begin to record the following: - mass/weight - capacity and volume	• measure mass • compare mass • measure capacity • compare capacity	double/half mass weight light heavy heavier full/empty more than less than capacity volume

Progression 	Year 2: (mass, capacity and temp) • choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); **mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit,** using rulers, **scales, thermometers and measuring vessels** • compare and order lengths, **mass, volume/capacity** and record the results using >, < and =			
Teacher Subject Knowledge 	ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Science Geography Computing DT			
Summer 1	Number: Multiplication and Division	Pupils should be taught to: • 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	• Count in 2s • Count in 5s • Count in 10s • Make equal groups • Add equal groups • Make arrays • Make doubles • Make equal groups - grouping • Make equal groups - sharing	
Progression	Year 2: • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • calculate mathematical statements for multiplication and division within the multiplication tables and write them using the			

	multiplication (×), division (÷) and equals (=) signs • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.			
Teacher Subject Knowledge 	ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Science Computing DT			
Summer 1/2	Number: Fractions	Pupils should be taught to: • 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.	• find a half • find a quarter	half quarter fraction equal whole parts shape object quantity
Progression	Year 2: • recognise, find, name and write fractions 1/3 , 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity • write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2 .			

				
Teacher Subject Knowledge 	Division: ActiveLearn: Planning (activelearnprimary.co.uk) Halves and Quarters: ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Science Computing DT			
Summer 2	Measurement: Money	Pupils should be taught to: • recognise and know the value of different denominations of coins and notes	• recognise coins • recognise notes • count in coins	pence coin pound note value
	Measurement: Time	• compare, describe and solve practical problems for: time (for example, quicker, slower, earlier, later) • measure and begin to record the following: time (hours, minutes, seconds) • sequence events in chronological order using language [for	• before and after • dates • time to the hour • time to the half hour • writing time • comparing time	before after next hours/minutes/seconds first today yesterday/tomorrow

		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		morning/afternoon evening month/week/day /year
Progression 	Year 2: • compare and sequence intervals of time • 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 and the number of hours in a day. • recognise and use symbols for 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			
Teacher Subject Knowledge 	Money: ActiveLearn: Planning (activelearnprimary.co.uk) Time: ActiveLearn: Planning (activelearnprimary.co.uk)			
Cross Curricular Links 	Science Computing DT English - Sequencing			

Key texts 	The Very Hungry Caterpillar by Eric Carle One Is a Snail, Ten Is a Crab: A Counting by Feet Book by April Pulley Sayre, Jeffrey Sayre and Randy Cecil The Doorbell Rang by Pat Hutchins The Shopping Basket by John Burningham Handa's Surprise by Eileen Browne Ten Apples Up On Top by Dr. Seuss Splash! by Ann Jonas RECOMMENDATIONS - MathsThroughStories.org - for specific topics