Maths Curriculum Overview – Key Stage 1

Curriculum Overview

YEAR 1

Year 1	Declarative- knowing what	Procedural- knowing how	Conditional- knowing when and why
Autumn Block 1 **Place Value within 10**	Read and write numbers from 1 to 10 in numerals and words. ***ACP: Quick quiz on mini whiteboards.*** Identify one more or less than a given number. ***ACP: Quick quiz on mini whiteboards.***		
Autumn Block 2 **Number: Addition and subtraction**		Compose numbers to 10 from 2-parts, and partition numbers to 10 into parts. **ACP: How many ways can you make 7?**	
Autumn Block 3 **Geometry: Shape**	Recognise common 2-D shapes: rectangles (including squares, circles and triangles presented in different orientations. ***ACP: PPT quick quiz. Show a variety of shapes and assess understanding orally.*** Recognise common 3D shapes: Including cuboids, cubes, pyramids and spheres presented in different orientations. ***ACP: Quick oral identification quiz.*** Know that the above shapes are not always similar to each other. ***ACP: Assess during above composites.***	Compose 2-D and 3_d shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations. ***ACP: Practical assessment.***	
Spring Block 1 **Place Value within 20**	Read and write numbers from 1 to 20 in numerals and words. ***ACP: Quick quiz on mini whiteboards.*** Identify one more or less than a given number.	Identify and represent numbers using objects and pictorial representations including the number line. ***ACP: PPT quick quiz. Show a variety of numbers using different representations.***	Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =. ***ACP: Assess orally and on mini whiteboards using the symbols.***

	ACP: Quick quiz on mini whiteboards.	***Children to identify and represent using a different representation.*** Use the language of: equal to, more than, less than, most, least ***ACP: Oral assessment.***	
Spring Block 2 **Addition and subtraction within 20**	Represent and use number bonds and related subtraction facts within 20. ***ACP: Recall on whiteboards.*** Develop fluency in addition and subtraction facts within 10. ***ACP: Speedy recall on Hit the Button (Topmarks)***	Add and subtract one-digit and two-digit numbers to 20, including zero. ***ACP: Low stakes test with access to resources.*** Read, write and interpret mathematical statements involving addition, subtraction and equals sign. ***ACP: Low stakes test.***	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations. ***ACP: Low stakes test with choice of resources.*** Solve missing number problems such as 7 = * - 9 ***ACP: Mini whiteboards.*** Relate additive expressions and equations to real-life contexts. ***ACP: Low stakes test.***
Spring Block 3 **Place Value within 50**	Identify one more or less than a given number. ***ACP: Quick quiz on mini whiteboards.***	Identify and represent numbers using objects and pictorial representations including the number line. ***ACP: PPT quick quiz. Show a variety of numbers using different representations. Children to identify and represent using a different representation.*** Use the language of: equal to, more than, less than, most, least ***ACP: Oral assessment.***	
Spring Block 4 **Measurement: Length and height**		Measure and record: lengths/heights, mass/weight, capacity volume, time. ***ACP: Practical session.***	Compare, describe and solve practical problems for: lengths/heights. ***ACP: Practical session.***
Spring Block 5 **Measurement: Mass and volume**		Measure and record: mass/weight, capacity volume. ***ACP: Practical session.***	Compare, describe and solve practical problems for: mass/weight, capacity volume. ***ACP: Practical session.***
Summer Block 1 **Number: Multiplication and division**		Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.	Solve one-step problems involving multiplication and division, using concrete objects, pictorial representations and arrays with support. ***ACP: Low stakes test.***

		ACP: Low stakes test.	
Summer Block 2 Number: Fractions	Recognise, find and name a half as one of two equal parts of an object, shape or quantity. ***ACP: Practical assessment.*** Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. ***ACP: Practical assessment.***		
Summer Block 3 Geometry: Position and direction	Use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside. ***ACP: Practical sessions to assess all aspects orally.***	Make whole, half, quarter and three-quarter turns in both directions. ***ACP: Practical sessions to assess all aspects orally.***	Connect turning clockwise with movement on a clock face. ***ACP: Practical sessions to assess all aspects orally.***
Summer Block 4 Number: Place Value within 100	Read and write numbers to 100 in numerals. ***ACP: Quick quiz on mini whiteboards.*** Count to and across 100 forwards and backwards. ***ACP: Oral counting as class. TA led; T assess.*** Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers. ***ACP: Oral counting as class. TA led; T assess.*** Recognise odd and even numbers. ***ACP: Oral recognition and reasoning of odd and even numbers 37 is odd because it ends in 7.***	Identify and represent numbers using objects and pictorial representations including the number line. ***ACP: PPT quick quiz. Show a variety of numbers using different representations. Children to identify and represent using a different representation.*** Use the language of: equal to, more than, less than, most, least ***ACP: Oral assessment.***	
Summer Block 5 Measurement: Money	Recognise and know the value of different denominations of coins. ***ACP: Practical assessment session.***		

Summer Block 6 **Measurement: Time**	Tell the time to the hour and half past the hour. ***ACP: Assess throughout the day: What time is it? Also use mini clocks.*** Recognise and use language relating to dates, including the days of the week, weeks, months and years. ***ACP: Oral assessment.***	Measure and record: time. ***ACP: Practical session.***	Sequence events in chronological order. ***ACP: Order 4 images of school day events.*** Compare, describe and solve practical problems for: time. ***ACP: Practical session.***

YEAR 2

Year 2	Declarative- knowing what	Procedural- knowing how	Conditional- knowing when and why
Autumn Block 1 **Place Value**	Read and write numbers to at least 100 in numerals and in words. ***ACP: Quiz on mini whiteboards.*** Identify numbers using different representations. ***ACP: Show numbers on a number line, using Base 10, bead string, part whole model etc.*** Recognise the value of each digit in a 2-digit number. ***ACP: Mini whiteboard quiz. What does this 2 represent?*** Count in steps of 10 from any number, forward and backwards. ***ACP: Oral counting using counting stick. TA lead and T asses.***	Order and compare numbers from 0 up to 100; use < > and = signs. ***ACP: Mini whiteboard with <, > and =*** Represent and estimate numbers using different representations, including the number line. ***ACP: Explode the number 7.*** Compose and decompose 2-digit numbers using standard and non-standard partitioning. ***ACP: How many ways can you partition 37?***	Reason about the location of any 2-digit number in the linear number system, including identifying the previous and next multiple of 10. ***ACP: Display a 1-100 number line. T asks questions about numbers, TA records.*** Use place value and number facts to solve problems. ***ACP: Quick quiz, multiple choice: plan in answers with misconceptions.***
Autumn Block 2 **Number: Addition and subtraction**	Secure fluency in addition and subtraction facts within 10. ***ACP: Rapid fire questions on mini whiteboards.*** Secure fluency in addition and subtraction facts that bridge 10, through continued practice. ***ACP: Rapid fire questions on mini whiteboards.*** Recall (to 10) and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100. ***ACP: Rapid fire questions on mini whiteboards.***	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. ***ACP: Low stakes test covering all aspects of the composite. Free choice of resources, assess level of abstraction.*** Add and subtract across 10. ***ACP: Mini quiz.*** Add and subtract within 100 by applying related 1-digit facts. ***ACP: Mini quiz.*** Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?" ***ACP: Multiple choice quiz.***	Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures. ***ACP: Low stakes test covering all aspects of the composite. Free choice of resources, assess level of abstraction.*** Apply their increasing knowledge of mental and written methods. ***ACP: Low stakes test covering all aspects of the composite. Orally assess methods used and reason for choice.*** Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. ***ACP: Quick quiz, multiple choice: plan in answers with misconceptions. Orally assess use of vocabulary.***

			Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. ***ACP: Low stakes test. Include questions which cover the above.***
Autumn Block 3 Geometry: Shape	Identify and describe the properties of 2-D shapes using precise language, including the number of sides and line symmetry in a vertical line. ***ACP: Show shapes and ask children to name and describe them.*** Identify and describe the properties of 3-D shapes using precise language, including the number of edges, vertices and faces. ***ACP: Show shapes and ask children to name and describe them.*** Identify 2-D shapes on the surface of 3-D shapes ***ACP: Show shapes and ask children to name faces.***	Compare and sort common 2-D and 3-D shapes and everyday objects. ***ACP: Practical session to assess all aspects of the composite orally.***	Order and arrange combinations of mathematical objects in patterns and sequences. ***ACP: Practical activities using Pattern Blocks/Unifix cubes.*** Compare 2D and 3D shapes by reasoning about similarities and differences in properties. ***ACP: Display 2 shapes e.g., a cube and a square, a cube and a cuboid. What is the same and what is different?***
Spring Block 1 Measurement: Money	Recognise and use symbols for pounds (£) and pence (p). ***ACP: Mini quiz on whiteboard in response to slide showing amounts.***	Combine amounts of money to make a particular value. ***ACP: Show coins to make 29p and 42p.*** Find different combinations of coins that equal the same amounts of money. ***ACP: Explode a pound.***	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. ***ACP: Practical activity.***
Spring Block 2 Number: Multiplication and division	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even number. ***ACP: TTRS – 2, 5 and 10s. Orally check for 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. ***ACP: Paper-based quiz involving all 3 signs in different locations.***	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. ***ACP: Low stakes quiz.*** Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).

			ACP: Quick quiz on whiteboards. Give unknown group problem. Children represent the same problem as missing factor multiplication problem. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. ***ACP: Present a fact family, Children identify incorrect statements e.g. 3 x 5 = 15, 5 x 3 = 15, 15 ÷3 = 5 & 3 ÷15 = 3.***
Spring Block 3 Measurement: Length and height		Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) using rulers. ***ACP: Practical observation.*** Compare and order lengths and record the results using >, < and = ***ACP: Practical session and observation of recording.***	
Spring Block 4 Measurement: Mass, Capacity & Temperature		Choose and use appropriate standard units to estimate and measure mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels. ***ACP: Practical observation.*** Compare and order mass, volume/capacity and record the results using >, < and = ***ACP: Practical session and observation of recording.***	
Summer Block 1 Fractions	Recognise, find, name and write fractions 1/3, 1/4 ,2/4 and 3/4 of a length, shape, set of objects or quantity. ***ACP: Low stakes paper-based quiz covering all elements of the composite.*** Recognise the equivalence of 2/4 and 1/2.	Write simple fractions for example, 1/2 of 6 = 3 ***ACP: Mini quiz to solve fractions. Include errors, such as ½ of 4 = 8***	

	ACP: Show an image of a shapes with ½ and 2/4 coloured. Ask what is the same and what is different?		
Summer Block 2 Measurement: 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. ***ACP: Low stakes test*** Know the number of minutes in an hour and the number of hours in a day. ***ACP: Oral responses.***	Draw the hands on a clock face and write the time to five minutes, including quarter past/to the hour. ***ACP: Low stakes test.*** Compare and sequence intervals of time. ***ACP: Low stakes test.***	
Summer Block 3 Statitistics		Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. ***ACP: Low stakes test.***	Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. ***ACP: Whole class oral responses.*** Ask and answer questions about totalling and comparing categorical data. ***ACP: Whole class oral responses.***
Summer Block 4 Geometry: Position and Direction	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 anticlockwise). ***ACP: Practical session***		Order and arrange combinations of mathematical objects in patterns and sequences. ***ACP: Practical activities using Pattern Blocks/Unifix cubes (Focus on orientation)***