Berwick Hills Primary School

Maths Recovery Plan

September 2020 Autumn Term Spring 1

Blue – Completely untaught

Yellow – Taught but not embedded

Reception Maths Objectives

Counts reliably with numbers from 0 – 20, place them in order and say which number is one more or one less than a given number

Can estimate a number of objects and check quantities by counting to 20

They solve problems, including doubling, halving and sharing

Solves practical problems that involve combining groups of 2,5,or 10 sharing into equal groups

Explores the characteristics of everyday objects, 2D and 3D shapes using mathematical language to describe them

Children talk about the properties of shape and patterns using vocabulary to describe position, direction and movement

Uses everyday language of measures (size, weight, capacity) when comparing quantities or solving problems

Estimates, measures, weighs and can compare and order objects. Talks about properties, position and the sequence of time

Year Group	Y1	Term	Spring

Time	Place Value	Number:	Measures:	Number:	Number: Fractions	Shape
Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

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

Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] and 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. | Count to 40 forwards and backwards, beginning with 0 or 1, or from any number.

Count, read and write numbers from 1-40 in numerals and words.

Identify and represent numbers using objects and pictorial representations.

Given a number, identify 1 more or 1 less. | Addition and Subtraction Add and subtract one digit and two digit numbers to 20, including zero.

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

Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems. | Length and height 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 lengths and heights. | Multiplication and Division Count in multiples of twos, fives and tens.

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. | 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. | 2D shape: -recognise -name -sort

3D shape: -explore -name -sort |

Year Group	Y1	Term	Summer

Place Value

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

Count, read and write numbers from 1-100 in numerals and words.

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

Given a number, identify one more and one less.

Number: Four Operations

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

Add and subtract one digit and two digit numbers to 20, including 0.

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

Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.

Count in multiples of twos, fives and tens. 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.

Measurement:

Money Recognise and know the value of different denominations of coins and notes.

Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.

Measurement: Weight and Volume

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 mass/weight, capacity and volume.

Year Group	Y2	Term	Spring

Measurement: Money

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.

Geometry: Properties of Shape

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.

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)

Number: Fractions

Recognise, find, name and write fractions 1/3, 14, 2/4 and ¾ of a length, shape, set of objects or quantity.

Write simple fractions eg ½ of 6= 3

Recognise equivalence of ¼ and ½

Year Group	Y2	Term	Summer

Measurement	Measurement
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 (^{o}C) to the nearest appropriate unit, using thermometers and measuring vessels. Compare and order volume/capacity & record the results using >, < and =.

Year Group	Y3	Term	Spring

Number: Multiplication and Division	Measurement	Number: Fractions
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Solve problems including missing number problems involving multiplication and division, positive integer scaling problems and correspondence problems in which n objects are connected to m objectives. Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental methods and progressing to formal written methods.	Tell and write the time from an analogue clock, including using Roman numerals, 12-hour and 24-hour clocks. Estimate and read time with increasing accuracy to the nearest minute. Record and compare time in terms of seconds, minutes and hours. Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year. Compare durations of events [for example calculate the time taken by particular events or tasks].	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Count up and down in tenths. Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10

Year Group	Y3	Term	Summer

Number: Fractions	Geometry: Property of Shapes	Measurement	Statistics
Recognise and show, using diagrams, equivalent fractions with small denominators. Add and subtract fractions with the same denominator within one whole. Compare and order unit fractions, and fractions with the same denominators. Solve problems that involve all of the above.	Recognise angles as a property of shape or a description of a turn. Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. Draw 2-D shapes and make 3-D shapes using modelling materials. Recognise 3-D shapes in different orientations and describe them.	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. Continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm).	Interpret and present data using bar charts, pictograms and tables. Solve one-step and two-step questions (for example, 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables.

	Year Group	Y4	Term	Spring

Money	Fractions	Time	Decimals
Solve simple measure and money problems involving fractions and decimals to two decimal places. Estimate, compare and calculate different measures, including money in pounds and pence.	Recognise and show, using diagrams, families of common equivalent fractions. Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Add and subtract fractions with the same denominator.	Convert between different units of measure, e.g. hour to minute. Read, write & convert time between analogue and digital 12 and 24 hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to ¼ ½ ¾ Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places.

Year Group	Y4	Term	Summer

Perimeter and Length	Angles	Shape and Symmetry	Position and Direction	Statistics	Area and Perimeter
Convert between different units of measure eg kilometre to metre. Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m	Identify acute and obtuse angles and compare and order angles up to two right angles by size. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.	Identify lines of symmetry in 2D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.	Describe positions on a 2D grid as coordinates in the first quadrant. Describe movements between positions as translations of a given unit to the left/ right and up/ down. Plot specified points and draw sides to complete a given polygon.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Convert between different units of measure [for example, kilometre to metre] Find the area of rectilinear shapes by counting squares.

Year Group	Y5	Term	Spring

Number: Fractions

Compare and order fractions whose denominators are multiples of the same number.

Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example + = = 1].

Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

Read and write decimal numbers as fractions [for example 0.71 =].

Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Number: Decimals

Read, write, order and compare numbers with up to three decimal places.

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.

Round decimals with two decimal places to the nearest whole number and to one decimal place.

Solve problems involving number up to three decimal places.

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.

Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

Number: Percentages

Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.

Solve problems which require knowing percentage and decimal equivalents of , , , , and those fractions with a denominator of a multiple of 10 or 25

Year Group	Y5	Term	Summer

Geometry: Angles	Geometry: Shapes	Geometry: Position and Direction	Measurement: Converting units	Number:	Perimeter and Area	Measures: Volume Estimate volume
Know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles. Draw given angles and measure them in degrees (˚). Identify: angles at a point and one whole turn (total 360 ˚), angles at a point on a straight line and ½ a turn (total 180˚) other multiples of 90˚.	Identify 3D shapes, including cubes and other cuboids, from 2D representation. Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml). Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Solve problems involving converting between units of time.	Prime Numbers Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19.	Measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate and compare the area of rectangles (including squares), and including using standard units, cm^2, m^2 estimate the area of irregular shapes.	(for example using 1cm^3 blocks to build cuboids (including cubes) and capacity (for example, using water)). Use all four operations to solve problems involving measure.