Term-by-term mathematics assessment across primary school

Curriculum Maps

for

Progress in Understanding Mathematics Assessment

Termly content for Year 1

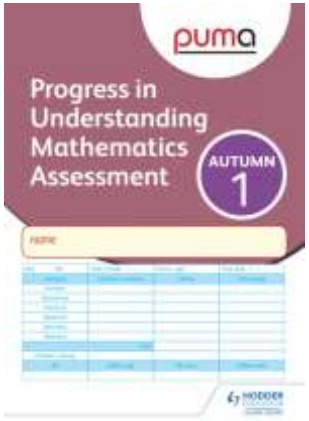
HODDER EDUCATION
A HODDER RESEARCH SCHOOL

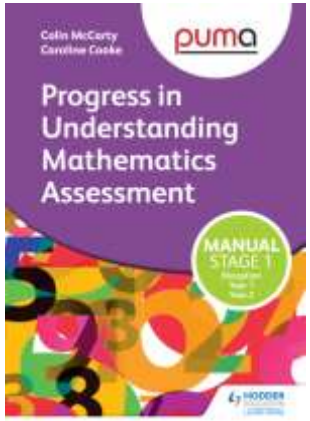
The *PUMA* tests provide thorough coverage of the **new** National Curriculum Programme of Study for the particular year. These Curriculum Maps take in the new PoS, which describes what should be covered by the end of each year, and suggest how teaching of the material might be allocated to each term. For any test to give reliable results, it needs to be valid – that is, to assess what has been taught – so the Curriculum Maps help to define what *PUMA* assesses each term.

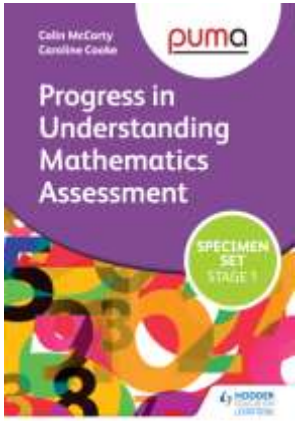
We hope that you will find the Curriculum Maps useful in planning your teaching and for liaison across the school. The *PUMA* test for each term includes much, but obviously not all, of the curriculum we have described for that term. We anticipate that much of the material is introduced in the Autumn term and reinforced in subsequent terms.

- Blue highlighting denotes specific material moved down from a higher year.
- Yellow highlighting denotes content not explicit in the PNS for the year, to help you transfer from your existing lesson planning.
- **Purple text** denotes repeated statements.
- *Italics* indicate illustrative examples, non-statutory notes and guidance from the new PoS. (NB most of the non-statutory notes and guidance are new, from a higher year, or beyond the PNS.)

You will notice a lot of yellow highlighting, to make you aware of even very small changes. It often indicates little more than an expansion and clarification of what you would already be teaching using the PNS. We have also highlighted the same material in all 3 terms, where it is typically taught in the autumn term, but used and reinforced in subsequent terms.







Year 1	Autumn	Spring	Summer
NUMBER			
Place value and rounding	• Count to 100, forwards and backwards, beginning with 0 or 1, or from any given number *e.g. 19, 18, 17, 16, …* • Count, read and write numbers to 100 in numerals, count in multiples of twos and tens *e.g. 2, 4, 6, 8, 10, 12, …* • Given 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 • *Use language of ordering e.g. first, second, third*	• 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 *e.g. 22, 24, 26, 28, 30, … or 90, 80, 70, 60, …* • Given 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. • *Use language of ordering e.g. first, second, third* • *Begin to recognise place value in numbers beyond 20 by reading, writing, counting and comparing numbers up to 100 supported by objects and pictorial representations* • *Begin to order numbers to 100 (different tens) e.g. order 36, 29, 63, 51*	• Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number *e.g. 103, 102, 101, 100, 99, 98, …* • Count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens *e.g. 5, 10, 15, 20, 25, …* • Given 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. • *Use language of ordering e.g. first, second, third* • *Begin to recognise place value in numbers beyond 20 by reading, writing, counting and comparing numbers up to 100 supported by objects and pictorial representations* • *Begin to order numbers to 100 (different tens)* • *Recognise odd and even numbers*
Addition and subtraction	• Read, write and interpret mathematical statements	• Read, write and interpret mathematical statements involving	• Read, write and interpret mathematical statements involving addition (+), subtraction

	involving addition (+), subtraction (-) and equals (=) signs • Represent, *memorise* and use number bonds and related subtraction facts *within 10, in several forms e.g. 3 + 4 = 7; 4 = 7 – 3;* • Add and subtract one-digit and two-digit numbers to 20 (9 + 9, 18 - 9), including zero • Solve simple one-step problems *(in familiar practical contexts, including using quantities)* that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems *e.g. 3 + □ = 7* • *Problems should include vocabulary such as: put together, add, altogether, total, take away, more than, less than…*	addition (+), subtraction (-) and equals (=) signs • Represent, *memorise* and use number bonds and related subtraction facts *within 10*, *in several forms, and begin to know doubles to 20 e.g. 8 + 8 = 16 complements to 20 e.g. 8 + 12 = 20* • Add and subtract one-digit and two-digit numbers to 20 (9 + 9, 18 - 9), including zero • Solve simple one-step problems *(in familiar practical contexts, including using quantities)* that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems • *Problems should include vocabulary such as: put together, add, altogether, total, take away,* distance between, *more than, less than…*	(-) and equals (=) signs • Represent, *memorise* and use number bonds and related subtraction facts within 20, *in several forms e.g. 9 + 7 = 16; 16 – 7 = 9; 7 = 16 - 9* • Add and subtract one-digit and two-digit numbers to 20 (9 + 9, 18 - 9), including zero • Solve simple one-step problems *(in familiar practical contexts, including using quantities)* that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems *e.g. 7 = □ - 9* • *Problems should include vocabulary such as: put together, add, altogether, total, take away, distance between, more than, less than…*

Multiplication and division	• *Double and halve numbers to 20 e.g. double 6 is 12, half of 10 is 5*	• *Double and halve numbers to 20 e.g. double 8 is 16, half of 20 is 10*	• *Double and halve numbers to 20* • 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 *e.g. share 8 sweets between 2 children*
Fractions	• Recognise, find and name a half as one of two equal parts of an object, shape, *length* or quantity *e.g. Find half of a length of string, by folding;*.	• Recognise, find and name a half as one of two equal parts of an object, shape, length or quantity *e.g. What is half of 12 counters?* • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity *e.g. find a quarter of a shape, by folding in half and half again*	• Recognise, find and name a half as one of two equal parts of an object, shape, length or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity *e.g. find ¼ of 12 beads, practically*
MEASUREMENT			
Measurement	• Compare, describe and solve practical problems for: ○ lengths and heights *(e.g. long/short, longer/shorter, tall/short, double/half)* ○ mass or weight *(e.g. heavy/light, heavier than, lighter than)* ○ capacity/volume *(full/empty, more than, less than)* ○ time *(quicker, slower, earlier, later)* • *Use non standard measures to* measure and begin to record the following: ○ lengths and heights	• Compare, describe and solve practical problems for: ○ lengths and heights *(e.g. long/short, longer/shorter, tall/short, double/half)* ○ mass or weight *(e.g. heavy/light, heavier than, lighter than)* ○ capacity/volume *(full/empty, more than, less than, quarter)* ○ time *(quicker, slower, earlier, later)* • *Begin to use measuring tools (ruler, weighing scales, containers) to* measure and begin to record the	• Compare, describe and solve practical problems for: ○ lengths and heights *(e.g. long/short, longer/shorter, tall/short, double/half)* ○ mass or weight *(e.g. heavy/light, heavier than, lighter than)* ○ capacity/volume *(full/empty, more than, less than, quarter)* ○ time *(quicker, slower, earlier, later)* • *Begin to use standard measures (metres, cms, grams/kg, litres) to* measure and begin to record the

	○ mass/weight ○ capacity and volume • Recognise and know the value of different denominations of coins • Sequence events in chronological order using language such as: 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 draw the hands on a clock face to show these times.	following: ○ lengths and heights ○ mass/weight ○ capacity and volume ○ time (hours, minutes) • Recognise and know the value of different denominations of coins and notes • Sequence events in chronological order using language such as: 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.	following: ○ lengths and heights ○ mass/weight ○ capacity and volume ○ time (hours, minutes, seconds) • Recognise and know the value of different denominations of coins and notes • Sequence events in chronological order using language such as: 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.
GEOMETRY			
Properties of shapes	• Recognise and name common 2-D and 3-D shapes, including: ○ 2-D shapes *(e.g. rectangles (including squares), circles and triangles)* ○ 3-D shapes *(e.g. cuboids, including cubes, pyramids and spheres).*	• Recognise and name common 2-D and 3-D shapes, *in different orientations and sizes*, including: ○ 2-D shapes *(e.g. rectangles (including squares), circles and triangles)* ○ 3-D shapes *(e.g. cuboids, including cubes, pyramids and spheres).* • *know that rectangles, triangles, cuboids and pyramids can be different shapes*	• Recognise and name common 2-D and 3-D shapes, *in different orientations and sizes,* including: ○ 2-D shapes *(e.g. rectangles (including squares), circles and triangles)* ○ 3-D shapes *(e.g. cuboids (including cubes), pyramids and spheres).* • *know that rectangles, triangles, cuboids and pyramids can be different shapes*

Position and direction	• *Describe positions, directions and movements using language such as 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…*	• *Describe positions, directions and movements using language such as 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…* • Describe position, directions and movements, including half and quarter turns, *in a clockwise direction*	• *Describe positions, directions and movements using language such as 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…* • Describe position, directions and movements, including half, quarter and three-quarter turns, *in a clockwise direction*