



Year 5 - Inspire Maths National Curriculum Correlation Chart

NC objective	Inspire Maths page reference	Additional activity
Number – number and place value		
Pupils should be taught to:		
<ul style="list-style-type: none"> read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit 	PB4A Unit 1: Numbers to 100 000 pp 8–21 PB5A Unit 1: Whole Numbers (1) pp 2–19	
<ul style="list-style-type: none"> count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 	PB4A Unit 1: Numbers to 100 000 pp 8, 10, 17, 18 PB5A Unit 1: Whole Numbers (1) pp 2, 6, 7, 18, 19	NC Activity 5.1
<ul style="list-style-type: none"> interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero 		NC Activity 5.2
<ul style="list-style-type: none"> round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 	PB4A Unit 2: Whole Numbers (2) pp 22–35 PB5A Unit 1: Whole Numbers (1) pp 20–28	NC Activity 5.3
<ul style="list-style-type: none"> solve number problems and practical problems that involve all of the above 	PB4A Unit 1: Numbers to 100 000 pp 11–14, 17–21 PB5A Unit 1: Whole Numbers (1) pp 11, 15, 25–28 PB4A Unit 2: Whole Numbers (2) pp 22–23, 26–28, 30–35 PB5A Unit 1: Whole Numbers (1) pp 23–28 PB5A Unit 2: Whole Numbers (2) pp 40–41	
<ul style="list-style-type: none"> read Roman numerals to 1000 (M) and recognise years written in Roman numerals. 		NC Activity 5.4



Number – addition and subtraction		
Pupils should be taught to:		
<ul style="list-style-type: none"> add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) 		NC Activity 5.5
<ul style="list-style-type: none"> add and subtract numbers mentally with increasingly large numbers 		NC Activity 5.6
<ul style="list-style-type: none"> use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 	PB4A Unit 2: Whole Numbers (2) pp 32, 35 PB5A Unit 1: Whole Numbers (1) pp 20, 23, 25, 26	
<ul style="list-style-type: none"> solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. 		
Number – multiplication and division		
Pupils should be taught to:		
<ul style="list-style-type: none"> identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers 	PB4A Unit 2: Whole Numbers (2) pp 36–44	
<ul style="list-style-type: none"> know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers 		NC Activity 5.7A NC Activity 5.7B NC Activity 5.7C
<ul style="list-style-type: none"> establish whether a number up to 100 is prime and recall prime numbers up to 19 		NC Activity 5.8



<ul style="list-style-type: none"> multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers 	PB4A Unit 3: Whole Numbers (3) pp 45–56, 63–70	NC Activity 5.9
<ul style="list-style-type: none"> multiply and divide numbers mentally drawing upon known facts 	PB4A Unit 2: Whole Numbers (2) pp 33–35 PB4A Unit 3: Whole Numbers (3) pp 48–51, 54–55, 60–62, 70 PB4B Unit 10: Decimals (2) pp 61–62, 65, 68, 70–71 PB5A Unit 2: Whole Numbers (2) pp 35–36, 38–41, 44, 47–49 PB5B Unit 7: Decimals pp 8, 13–14, 19–20, 24–25	NC Activity 5.10
<ul style="list-style-type: none"> divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context 	PB3A Unit 7: Division pp 93–110 PB4A Unit 3: Whole Numbers (3) pp 57–70	NC Activity 5.11
<ul style="list-style-type: none"> multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 	PB5A Unit 2: Whole Numbers (2) pp 33–49 PB5B Unit 7: Decimals pp 4–25	
<ul style="list-style-type: none"> recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) 		NC Activity 5.12
<ul style="list-style-type: none"> solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes 	PB5B Unit 8: Measurements pp 37–49 PB6B Unit 11: Volume of Solids and Liquids pp 102–109, 113–120	
<ul style="list-style-type: none"> solve problems involving addition, 	PB3A Unit 8: Solving Word Problems 2:	



subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	Multiplication and Division pp 111–123 PB4A Unit 3: Whole Numbers (3) pp 63–70 PB5A Unit 2: Whole Numbers (2) pp 57–69	
<ul style="list-style-type: none"> solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. 	PB4A Unit 5: Fractions pp 111–116 PB4B Unit 10: Decimals (2) pp 77–79 PB5A Unit 2: Whole Numbers (2) pp 57–61 PB6B Unit 7: Speed pp 2–11, 20	
Number – fractions (including decimals and percentages)		
Pupils should be taught to:		
<ul style="list-style-type: none"> compare and order fractions whose denominators are all multiples of the same number 	PB3B Unit 14: Fractions pp 75–83	
<ul style="list-style-type: none"> identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths 	PB3B Unit 14: Fractions pp 69–72, 79–80	NC Activity 5.13
<ul style="list-style-type: none"> 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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] 	PB4A Unit 5: Fractions pp 87–103 PB5A Unit 3: Fractions (1) pp 87–95	
<ul style="list-style-type: none"> add and subtract fractions with the same denominator and denominators that are 	PB3B Unit 14: Fractions pp 84–90 PB4A Unit 5: Fractions pp 101–103, 108–109, 115	



<p>multiples of the same number</p>		
<ul style="list-style-type: none"> multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams 	<p>PB4A Unit 5: Fractions pp 107, 112–115 PB5A Unit 4: Fractions (2) pp 112–115, 124–126, 132</p>	
<ul style="list-style-type: none"> read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] 	<p>PB4B Unit 9: Decimals (1) pp 12–13, 19–20, 26–27, 42–44 PB5B Unit 7: Decimals pp 2–3</p>	
<ul style="list-style-type: none"> recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents 	<p>PB4B Unit 9: Decimals (1) pp 21–33 PB5B Unit 7: Decimals pp 2–3</p>	
<ul style="list-style-type: none"> round decimals with two decimal places to the nearest whole number and to one decimal place 	<p>PB4B Unit 9: Decimals (1) pp 35–36, 38–39</p>	
<ul style="list-style-type: none"> read, write, order and compare numbers with up to three decimal places 	<p>PB4B Unit 9: Decimals (1) pp 8–33, 45</p>	
<ul style="list-style-type: none"> solve problems involving number up to three decimal places 	<p>PB4B Unit 9: Decimals (1) pp 27, 30, 32, 33, 45 PB4B Unit 10: Decimals (2) pp 48, 50, 52, 58–60, 61, 63, 64, 66, 68–69, 77–80 PB5B Unit 7: Decimals pp 30–34</p>	<p>NC Activity 5.14</p>
<ul style="list-style-type: none"> 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 	<p>PB5B Unit 10: Percentage pp 64–70, 90</p>	
<ul style="list-style-type: none"> solve problems which require knowing 	<p>PB5B Unit 10: Percentage pp 73–76</p>	<p>NC Activity 5.15</p>



percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.	PB6A Unit 6: Percentage pp 113-115, pp 117-119	
Measurement		
Pupils should be taught to:		
<ul style="list-style-type: none"> convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) 	PB5B Unit 8: Measurements pp 37–49	NC Activity 5.16
<ul style="list-style-type: none"> understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints 		NC Activity 5.17
<ul style="list-style-type: none"> measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres 	PB3B Unit 18: Area and Perimeter pp 163–167	
<ul style="list-style-type: none"> calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes 	PB3B Unit 18: Area and Perimeter pp 169–173 PB4B Unit 12: Area and Perimeter pp 107–108, 110–116	NC Activity 5.18
<ul style="list-style-type: none"> estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] 		NC Activity 5.19



and capacity [for example, using water]		
<ul style="list-style-type: none"> ▪ solve problems involving converting between units of time 	PB3B Unit 15: Time pp 95–104, 111–114 PB4B Unit 11: Time pp 84–85, 90–97	NC Activity 5.20
<ul style="list-style-type: none"> ▪ use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. 	PB4B Unit 10: Decimals (2) pp 52, 58–60, 63, 64, 68–69, 77–79 PB5B Unit 7: Decimals pp 13, 30–36 PB5B Unit 8: Measurements pp 40–41, 47–48 PB5B Unit 14: Volume of Cubes and Cuboids pp 179–181, 183–184	
Geometry – properties of shapes		
Pupils should be taught to:		
<ul style="list-style-type: none"> ▪ identify 3-D shapes, including cubes and other cuboids, from 2-D representations 	PB5B Unit 14: Volume of Cubes and Cuboids pp 155–163 PB6A Unit 3: Nets pp 48–62	NC Activity 5.21
<ul style="list-style-type: none"> ▪ know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles 	PB4A Unit 6: Angles pp 119–121	NC Activity 5.22
<ul style="list-style-type: none"> ▪ draw given angles, and measure them in degrees (°) 	PB4A Unit 6: Angles pp 119–124	
<ul style="list-style-type: none"> ▪ identify: <ul style="list-style-type: none"> ▪ angles at a point and one whole turn (total 360°) ▪ angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) 	PB4A Unit 6: Angles pp 125, 128–130, 132 PB5B Unit 11: Angles pp 92–94, 96, 97–99, 101	NC Activity 5.23



<ul style="list-style-type: none"> ▪ other multiples of 90° 		
<ul style="list-style-type: none"> ▪ use the properties of rectangles to deduce related facts and find missing lengths and angles 	PB4A Unit 8: Squares and Rectangles pp 146–152 PB4B Unit 12: Area and Perimeter pp 98–103, 105–116	
<ul style="list-style-type: none"> ▪ distinguish between regular and irregular polygons based on reasoning about equal sides and angles. 		This activity is covered in Year 6 NC Activities
Geometry – position and direction		
Pupils should be taught to:		
<ul style="list-style-type: none"> ▪ 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. 		NC Activity 5.24
Statistics		
Pupils should be taught to:		
<ul style="list-style-type: none"> ▪ solve comparison, sum and difference problems using information presented in a line graph 	PB4A Unit 4: Tables and Line Graphs pp 79–85	
<ul style="list-style-type: none"> ▪ complete, read and interpret information in tables, including timetables. 	PB4A Unit 4: Tables and Line Graphs pp 71–78, 86	NC Activity 5.25