

National Curriculum for England 2014

Which National Curriculum attainment targets are covered in each Abacus week?



Key: * first time attainment target is covered ** consolidation ↓ NC objective in a year below ↑NC objective in a year above '(S)' covered in starter activities

Abacus always covers the content of the National Curriculum within the paired age range (i.e. Y1/2, Y3/4, 5/6). Very occasionally Abacus postpones something from the first year of a range e.g. Year 3 and teaches it in Year 4. This is to ensure a rigorous progression in terms of children's acquisition of mathematical skills. Less occasionally Abacus teaches something from the second year of an age range in the first year. This is to ensure that the building blocks are in place for more challenging topics and to allow critical and challenging skills to be consolidated and revisited.

Abacus			National Curriculum in England		
Wk	Strands	Weekly Summary	Yr	Domain	Attainment target
1	Number and place-value (NPV); Written addition and subtraction (WAS)	Read, write, compare and order 5-digit numbers, understanding the place-value and using < and > signs; add and subtract multiples of 10, 100 and 1000 to and from 5-digit numbers; use written addition to add two 4-digit numbers; sustain a line of enquiry, make and test a hypothesis	5	Number - number and place value	**Y5.NPV.1 read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
			5	Number - number and place value	*Y5.NPV.2 count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
			5	Number - addition and subtraction	*Y5.NAS.1 add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
			4	Number - number and place value	↓**Y4.NPV.6 identify, represent and estimate numbers using different representations (S)
			4	Number - number and place value	↓**Y4.NPV.1 count in multiples of 6, 7, 9, 25 and 1000 (S)
2	Mental addition and subtraction (MAS); Number and place-value (NPV)	Add and subtract 2-digit numbers mentally; choose a strategy for solving mental additions or subtractions; solve word problems	5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers
			5	Number - addition and subtraction	*Y5.NAS.4 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
			5	Number - number and place value	**Y5.NPV.5 solve number problems and practical problems that involve all of the above
			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks (S)
3	Decimals, percentages and their equivalence to fractions (DPE); Number and place-value (NPV); Mental multiplication and division (MMD)	Understand place-value in decimal numbers; multiply and divide numbers with up to two decimal places by 10 and 100; multiply and divide by 0 and 100; add and subtract 0.1 and 0.01; multiply and divide by 4 by doubling or halving twice; use mental multiplication strategies to multiply by 20, 25 and 9	4	Number-fractions	↓**Y4.NF.5 recognise and write decimal equivalents of any number of tenths or hundredths
			5	Number-fractions	*Y5.NF.9 read, write, order and compare numbers with up to three decimal places
			5	Number-multiplication and division	**Y5.NMD.7 multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
			5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts
			5	Number - number and place value	**Y5.NPV.1 read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (S)
			5	Number-fractions	**Y5.NF.10 solve problems involving number up to three decimal places (S)
5	Number - number and place value	**Y5.NPV.5 solve number problems and practical problems that involve all of the above (S)			

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			4	Number-multiplication and division	↓**Y4.NMD.2 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers (S)
4	Measurement (MEA)	Revise converting 12-hour clock times to 24-hour clock times; find a time a given number of minutes or hours and minutes later; calculate time intervals using 24-hour clock format; measure lengths in mm and convert to cm; find perimeters in cm and convert cm to m	4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks
			5	Measurement	*Y5.M.6 solve problems involving converting between units of time
			5	Measurement	**Y5.M.1 convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
			5	Measurement	*Y5.M.3 measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
			4	Measurement	↓**Y4.M.2 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
			4	Number-multiplication and division	↓**Y4.NMD.1 recall multiplication and division facts for multiplication tables up to 12 x 12 (S)
5	Written addition and subtraction (WAS); Mental addition and subtraction (MAS)	Solve subtraction using a written method for 3-digit – 3-digit numbers and for 4-digit numbers; use counting up (Frog) as a strategy to perform mental subtraction; find change from a multiple of ten pounds using counting up	4	Number - addition and subtraction	↓**Y4.NAS.1 add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
			4	Number - addition and subtraction	↓**Y4.NAS.2 estimate and use inverse operations to check answers to a calculation
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers
6	Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP)	Recognise which numbers are divisible by 2, 3, 4, 5, 6, 9 and 25 and identify multiples; find factors; recording results systematically and finding all factors of a given number; compare and place fractions on a line; find equivalent fractions and reduce them to their simplest form	5	Number-multiplication and division	**Y5.NMD.1 identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
			5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts
			5	Number-fractions	**Y5.NF.1 compare and order fractions whose denominators are all multiples of the same number
			5	Number-fractions	**Y5.NF.2 identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
			6	Number-fractions	↑*Y6.NF.1 use common factors to simplify fractions; use common multiples to express fractions in the same denomination
			4	Number - number and place value	↓**Y4.NPV.1 count in multiples of 6, 7, 9, 25 and 1000 (S)

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			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks (S)
7	Number and place-value (NPV); Written multiplication and division (WMD)	Use mental strategies to multiply and divide multiples of 10 and 100; use a written method to multiply 3-digit and 4-digit numbers by 1-digit numbers and estimate answers, divide 3-digit numbers by 1-digit numbers using a written method and express remainders as a fraction; solve division word problems	5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts
			5	Number-multiplication and division	**Y5.NMD.4 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
			5	Number-multiplication and division	**Y5.NMD.7 multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
			4	Number-multiplication and division	↓**Y4.NMD.2 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
			5	Number - addition and subtraction	*Y5.NAS.3 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
			5	Number-multiplication and division	*Y5.NMD.9 solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
			5	Number-multiplication and division	**Y5.NMD.6 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
			5	Number-multiplication and division	**Y5.NMD.1 identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers (S)
			5	Number-fractions	**Y5.NF.2 identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths (S)
			4	Number-fractions	↓**Y4.NF.5 recognise and write decimal equivalents of any number of tenths or hundredths (S)
8	Geometry: properties of shapes (GPS)	Use a protractor to measure and draw angles in degrees; recognise, use terms and classify angles as obtuse, acute and reflex; recognise that angles on a line total 180° and angles round a point total 360°; identify and name parts of a circle including diameter, radius and	5	Geometry- properties of shapes	*Y5.GPS.2 know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
			5	Geometry- properties of shapes	*Y5.GPS.3 draw given angles, and measure them in degrees (o)
			5	Geometry- properties of shapes	*Y5.GPS.4 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 ½ a turn (total 180°) other multiples of 90°
			5	Geometry- properties	*Y5.GPS.6 distinguish between regular and irregular polygons based on reasoning

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		circumference; draw circles to a given radius using a pair of compasses; relate angles to turns, and recognise that a 360° angle is a complete turn; use angle facts to solve problems related to turn		of shapes	about equal sides and angles
			6	Geometry- properties of shapes	↑*Y6.GPS.4 illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
			6	Geometry- properties of shapes	↑*Y6.GPS.5 recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
			4	Number - number and place value	↓**Y4.NPV.4 recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (S)
			4	Number - number and place value	↓**Y4.NPV.6 identify, represent and estimate numbers using different representations (S)
			4	Number - number and place value	↓**Y4.NPV.5 order and compare numbers beyond 1000 (S)
			4	Measurement	↓**Y4.M.1 Convert between different units of measure [for example, kilometre to metre; hour to minute] (S)
			5	Measurement	**Y5.M.1 convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) (S)
			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks (S)
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers (S)
9	Number and place-value (NPV); Fractions, ratio and proportion (FRP); Decimals, percentages and their equivalence to fractions (DPE)	Place numbers to 100 000 and decimals up to two places on a line, round numbers to the nearest 10, 100 and 1000 and decimals up to two places to the nearest whole number; compare and order numbers with up to two decimal places; reduce fractions to their simplest form; know and recognise equivalent fractions and decimals to half, tenths and fifths	5	Number - number and place value	**Y5.NPV.1 read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
			5	Number - number and place value	*Y5.NPV.4 round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
			4	Number-fractions	↓**Y4.NF.9 compare numbers with the same number of decimal places up to two decimal places
			5	Number-fractions	*Y5.NF.8 round decimals with two decimal places to the nearest whole number and to one decimal place
			6	Number-fractions	↑**Y6.NF.1 use common factors to simplify fractions; use common multiples to express fractions in the same denomination
			5	Number-fractions	*Y5.NF.6 read and write decimal numbers as fractions [for example, 0.71 = 71/100]
			5	Number - addition and subtraction	**Y5.NAS.3 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy (S)
			4	Number - number and place value	↓**Y4.NPV.1 count in multiples of 6, 7, 9, 25 and 1000 (S)
10	Number and place-value (NPV); Mental addition and	Revise mental and written addition and subtraction strategies; choose to use a mental strategy or written	5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers
			5	Number - addition	**Y5.NAS.1 add and subtract whole numbers with more than 4 digits, including using

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	subtraction (MAS) ; Written addition and subtraction (WAS) ; Mental multiplication and division (MMD) ; Written multiplication and division (WMD)	method to solve addition and subtraction; choose to solve word problems involving multiplication and division questions including 2- and 3-digit × 1-digit and 2-digit × 2-digit using a mental or a written method; use mathematical reasoning to work out a function; identify the operation being used on numbers; understand that addition and subtraction are inverse operations multiplication and division; use function machines		and subtraction	formal written methods (columnar addition and subtraction)
			4	Number - addition and subtraction	↓**Y4.NAS.1 add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
			5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts
			5	Number-multiplication and division	**Y5.NMD.4 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
			5	Number-multiplication and division	**Y5.NMD.6 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
			5	Number-multiplication and division	**Y5.NMD.10 solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
			4	Number - addition and subtraction	↓**Y4.NAS.2 estimate and use inverse operations to check answers to a calculation
			4	Number - number and place value	↓**Y4.NPV.2 find 1000 more or less than a given number (S)
11	Number and place-value (NPV) ; Decimals, percentages and their equivalence to fractions (DPE)	Read, write and order numbers with up to 6 digits and understand the place-value of each digit; place 6-digit numbers on a number line and find numbers between; solve place-value additions and subtractions with 6-digit numbers; understand place-value in decimal numbers as tenths and hundredths; multiply and divide by 10 /100/1000 using a place-value grid; understand place-value in decimal numbers to 2-decimal places; place decimal numbers on a line; round 2-place	5	Number - number and place value	**Y5.NPV.1 read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
			4	Number-fractions	↓**Y4.NF.5 recognise and write decimal equivalents of any number of tenths or hundredths
			5	Number-fractions	**Y5.NF.6 read and write decimal numbers as fractions [for example, 0.71 = 71/100]
			5	Number-multiplication and division	**Y5.NMD.7 multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
			5	Number-fractions	**Y5.NF.8 round decimals with two decimal places to the nearest whole number and to one decimal place
			4	Number - number and place value	↓**Y4.NPV.4 recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (S)
			4	Number - number and place value	↓**Y4.NPV.6 identify, represent and estimate numbers using different representations (S)
			4	Number-fractions	↓**Y4.NF.6 recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ (S)

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		decimal numbers to nearest tenth and whole number; say the number a tenth or a hundredth more	4	Number-fractions	↓**Y4.NF.10 solve simple measure and money problems involving fractions and decimals to two decimal places (S)
			5	Measurement	**Y5.M.1 convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) (S)
			4	Measurement	↓**Y4.M.1 Convert between different units of measure [for example, kilometre to metre; hour to minute] (S)
12	Mental addition and subtraction (MAS); Written addition and subtraction (WAS)	Rehearse mental addition strategies for decimals and whole numbers; use counting on as a strategy to perform mental addition of 2-place decimals to the next whole number; solve missing number sentences; use mental strategies to solve multi-step word problems; use counting up as a strategy to perform written subtraction (Frog)	5	Number-fractions	**Y5.NF.10 solve problems involving number up to three decimal places
			5	Number-fractions	*Y5.NF.9 read, write, order and compare numbers with up to three decimal places
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers
			5	Number - addition and subtraction	**Y5.NAS.4 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
			4	Number - addition and subtraction	↓**Y4.NAS.1 add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers (S)
13	Number and place-value (NPV); Mental multiplication and division (MMD); Measurement (MEA)	Use rules of divisibility to find if numbers are divisible by 2, 3, 4, 5, 9 and 10; identify prime numbers; revise finding factors of numbers; find squares and square roots of square numbers; finding patterns and making and testing rules; use mental multiplication and division strategies; relate mental division strategies to multiples of ten of the divisor	5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts
			5	Number-multiplication and division	*Y5.NMD.3 establish whether a number up to 100 is prime and recall prime numbers up to 19
			5	Number-multiplication and division	*Y5.NMD.2 know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
			5	Number-multiplication and division	*Y5.NMD.8 recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
			5	Number-multiplication and division	**Y5.NMD.9 solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
			4	Number-multiplication and division	↓**Y4.NMD.1 recall multiplication and division facts for multiplication tables up to 12 x 12 (S)
			4	Number-multiplication and	↓**Y4.NMD.3 recognise and use factor pairs and commutativity in mental calculations (S)

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				division	
14	Geometry: properties of shapes (GPS) ; Measurement (MEA)	Know properties of equilateral, isosceles, scalene and right-angled triangles; find that angles in a triangle have a total of 180°; sort triangles according to their properties; use scales to weigh amounts to the nearest half interval; convert from grams to kilograms and vice versa, from millilitres to litres and vice versa, and from metres to kilometres and vice versa; read scales to the nearest half division; understand that we measure distance in kilometres and miles; use ready reckoning to give approximate values of miles in kilometres and vice versa; draw line conversion graphs	6	Geometry- properties of shapes	↑**Y6.GPS.5 recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
			5	Geometry- properties of shapes	**Y5.GPS.3 draw given angles, and measure them in degrees (o)
			4	Geometry- properties of shapes	↓**Y4.GPS.1 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
			5	Measurement	**Y5.M.1 convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
			5	Measurement	**Y5.M.2 understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
			5	Statistics	*Y5.S.1 solve comparison, sum and difference problems using information presented in a line graph
			4	Number- multiplication and division	↓**Y4.NMD.2 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers (S)
			4	Number - number and place value	↓**Y4.NPV.7 round any number to the nearest 10, 100 or 1000 (S)
			6	Geometry- properties of shapes	↑*Y6.GPS.1 draw 2-D shapes using given dimensions and angles (S)
			4	Number - number and place value	↓**Y4.NPV.3 count backwards through zero to include negative numbers (S)
			5	Number - number and place value	**Y5.NPV.3 interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero (S)
			5	Statistics	**Y5.S.2 complete, read and interpret information in tables, including timetables
			4	Statistics	↓**Y4.S.2 solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs (S)
15	Written addition and subtraction (WAS)	Use a written column method to add amounts of money in pounds and pence; add 2-place decimals using written column addition; subtract decimal numbers using counting up (Frog)	4	Number-fractions	↓**Y4.NF.10 solve simple measure and money problems involving fractions and decimals to two decimal places
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers (S)
			5	Number - number and place value	**Y5.NPV.5 solve number problems and practical problems that involve all of the above (S)
			5	Number-fractions	**Y5.NF.8 round decimals with two decimal places to the nearest whole number and to one decimal place (S)
16	Written multiplication and	Use a written method (grid) to multiply pairs of 2-digit numbers;	5	Number- multiplication and	**Y5.NMD.4 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

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	division (WMD)	use short division to divide 3-digit numbers by 1-digit numbers, including those which leave a remainder		division	
			5	Number - addition and subtraction	**Y5.NAS.3 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
			5	Number-multiplication and division	**Y5.NMD.6 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
			5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts (S)
			5	Number-multiplication and division	**Y5.NMD.7 multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 (S)
17	Written multiplication and division (WMD); Fractions, ratio and proportion (FRP)	Find unit fractions and non-unit fractions of 3-digit numbers; use short multiplication to multiply 3-digit numbers by 1-digit numbers; begin to use short multiplication to multiply 4-digit numbers by 1-digit numbers	6	Number-fractions	↑*Y6.NF.6 associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]
			5	Number-multiplication and division	**Y5.NMD.4 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
			5	Number - addition and subtraction	**Y5.NAS.3 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
			4	Measurement	↓**Y4.M.2 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres (S)
			5	Number-fractions	**Y5.NF.2 identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths (S)
			4	Number - number and place value	↓**Y4.NPV.3 count backwards through zero to include negative numbers (S)
			5	Number - number and place value	**Y5.NPV.3 interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero (S)
18	Geometry: properties of shapes (GPS); Measurement (MEA)	Understand what a polygon is; draw polygons using dotted square and isometric paper; revise terms obtuse, acute and reflex angles, perpendicular and parallel sides; recognise quadrilaterals as polygons and identify their properties; classify quadrilaterals; draw regular polygons and explore their properties; revise metric units of	5	Geometry- properties of shapes	**Y5.GPS.6 distinguish between regular and irregular polygons based on reasoning about equal sides and angles
			4	Geometry- properties of shapes	↓**Y4.GPS.1 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
			5	Measurement	**Y5.M.2 understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
			5	Number-fractions	**Y5.NF.8 round decimals with two decimal places to the nearest whole number and to one decimal place (S)
			5	Number-fractions	**Y5.NF.1 compare and order fractions whose denominators are all multiples of the same number (S)
			4	Number-fractions	↓**Y4.NF.5 recognise and write decimal equivalents of any number of tenths or

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		weight, capacity and length; understand that we can measure in imperial units and relate these to their instances in daily life			hundredths (S)
			4	Number-fractions	↓**Y4.NF.6 recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ (S)
			4	Number-fractions	↓**Y4.NF.10 solve simple measure and money problems involving fractions and decimals to two decimal places (S)
			5	Geometry- properties of shapes	*Y5.GPS.5 use the properties of rectangles to deduce related facts and find missing lengths and angles
			6	Geometry- properties of shapes	↑**Y6.GPS.1 draw 2-D shapes using given dimensions and angles (S)
			6	Geometry- properties of shapes	↑**Y6.GPS.4 illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius (S)
			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks (S)
			4	Measurement	↓**Y4.M.6 solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (S)
19	Fractions, ratio and proportion (FRP)	Place mixed numbers on lines; count up in fractions using equivalence; convert improper fractions to mixed numbers and vice versa; write improper fractions as mixed numbers and vice versa; multiply proper fractions by whole numbers	5	Number-fractions	**Y5.NF.3 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, $\frac{2}{5} + \frac{1}{5} = 6/5 = 1\frac{1}{5}$]
			5	Number-fractions	*Y5.NF.5 multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
			4	Number-fractions	↓**Y4.NF.2 count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten (S)
			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks (S)
			4	Number-fractions	↓**Y4.NF.3 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 (S)
			4	Number - number and place value	↓**Y4.NPV.3 count backwards through zero to include negative numbers (S)
20	Written addition and subtraction (WAS)	Solve subtraction of 4-digit numbers using written column subtraction (decomposition); add several numbers using written column addition; use column addition to solve problems	4	Number - addition and subtraction	↓**Y4.NAS.1 add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
			5	Measurement	*Y5.M.7 use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling
			4	Number-multiplication and division	↓**Y4.NMD.3 recognise and use factor pairs and commutativity in mental calculations (S)
			5	Number-multiplication and division	**Y5.NMD.1 identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers (S)

National Curriculum for England 2014
Which National Curriculum attainment targets are covered in each Abacus week?



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Abacus			National Curriculum in England		
Wk	Strands	Weekly Summary	Yr	Domain	Attainment target
			6	Number – Addition, Subtraction, Multiplication and Division	↑*Y6.ASMD.5 identify common factors, common multiples and prime numbers (S)
			5	Number - number and place value	**Y5.NPV.5 solve number problems and practical problems that involve all of the above (S)
			5	Number - addition and subtraction	**Y5.NAS.4 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers (S)
21	Mental addition and subtraction (MAS); Decimals, percentages and their equivalence to fractions (DPE)	Add mentally 2-place decimal numbers in the context of money using rounding; add several small amounts of money using mental methods; mentally subtract amounts of money including giving change; calculate the difference between two amounts using counting up; solve word problems, including 2-step problems, choosing an appropriate method	5	Measurement	**Y5.M.7 use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling
			5	Number - addition and subtraction	**Y5.NAS.3 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers
			5	Number - addition and subtraction	**Y5.NAS.4 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
			4	Number - number and place value	↓**Y4.NPV.7 round any number to the nearest 10, 100 or 1000 (S)
			5	Measurement	**Y5.M.2 understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints (S)
22	Fractions, ratio and proportion (FRP); Written multiplication and division (WMD)	Multiply fractions less than 1 by whole numbers, convert improper fractions to whole numbers; use short multiplication to multiply 3-digit and 4-digit numbers by 1-digit numbers; use long multiplication to multiply 2-digit and 3-digit numbers by teens numbers	5	Number-fractions	**Y5.NF.5 multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
			5	Number-fractions	**Y5.NF.3 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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]
			5	Number - addition and subtraction	**Y5.NAS.3 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
			5	Number-multiplication and division	**Y5.NMD.4 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
			4	Number - number and place value	↓**Y4.NPV.1 count in multiples of 6, 7, 9, 25 and 1000 (S)
			5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts
			4	Measurement	↓**Y4.M.1 Convert between different units of measure [for example, kilometre to metre;

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Wk	Strands	Weekly Summary	Yr	Domain	Attainment target
					hour to minute] (S)
23	Decimals, percentages and their equivalence to fractions (DPE); Number and place-value (NPV)	Read, write and compare decimals to three decimal places, understanding that the third decimal place represents thousandths; multiply and divide numbers by 10, 100 and 1000 using 3-place decimal numbers in the calculations; place 2-place decimals on a number line and round them to the nearest tenth and whole number; read, write, order and compare 3-place decimal numbers; understand and use negative numbers in the context of temperature	5	Number-fractions	*Y5.NF.7 recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
			5	Number-fractions	**Y5.NF.6 read and write decimal numbers as fractions [for example, 0.71 = 71/100]
			5	Number-multiplication and division	**Y5.NMD.7 multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
			5	Number-fractions	**Y5.NF.9 read, write, order and compare numbers with up to three decimal places
			5	Number-fractions	**Y5.NF.10 solve problems involving number up to three decimal places
			5	Number-fractions	**Y5.NF.8 round decimals with two decimal places to the nearest whole number and to one decimal place
			4	Number-fractions	↓**Y4.NF.9 compare numbers with the same number of decimal places up to two decimal places
			5	Number - number and place value	**Y5.NPV.3 interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
			6	Number - number and place value	↑*Y6.NPV.3 use negative numbers in context, and calculate intervals across zero
			5	Number - number and place value	**Y5.NPV.5 solve number problems and practical problems that involve all of the above (S)
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers (S)
			4	Number-fractions	↓**Y4.NF.6 recognise and write decimal equivalents to 1/4, 1/2, 3/4 (S)
			4	Number-fractions	↓**Y4.NF.10 solve simple measure and money problems involving fractions and decimals to two decimal places (S)
			5	Number-fractions	*Y5.NF.11 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 (S)
4	Measurement	↓**Y4.M.6 solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (S)			
24	Geometry: position and direction (GPD); Geometry: properties of shapes (GPS)	Read and mark co-ordinates in the first two quadrants; draw simple polygons using co-ordinates; translate simple polygons by adding to and subtracting from the co-ordinates; reflect simple shapes in the y axis or in a line, noting the effect on	4	Geometry - position and direction	↓**Y4.GPD.1 describe positions on a 2-D grid as coordinates in the first quadrant
			5	Geometry - position and direction	*Y5.GPD.1 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
			4	Geometry - position and direction	↓**Y4.GPD.3 plot specified points and draw sides to complete a given polygon

National Curriculum for England 2014
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Wk	Strands	Weekly Summary	Yr	Domain	Attainment target
		the co-ordinates; translate simple shapes and note what happens to the co-ordinates; draw regular and irregular 2D shapes using given dimensions and angles; use the properties of 2D shapes, including rectangles, to derive related facts; identify 3D shapes from 2D representations; create 3D shapes using 2D nets and draw 3D shapes	5	Geometry- properties of shapes	**Y5.GPS.5 use the properties of rectangles to deduce related facts and find missing lengths and angles
			5	Geometry- properties of shapes	*Y5.GPS.1 identify 3-D shapes, including cubes and other cuboids, from 2-D representations
			6	Geometry- properties of shapes	↑*Y6.GPS.2 recognise, describe and build simple 3-D shapes, including making nets
			5	Number-fractions	**Y5.NF.8 round decimals with two decimal places to the nearest whole number and to one decimal place (S)
			5	Number - number and place value	**Y5.NPV.1 read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (S)
			5	Number - number and place value	**Y5.NPV.4 round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 (S)
			5	Number - addition and subtraction	**Y5.NAS.3 use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy (S)
			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks (S)
			5	Number - number and place value	**Y5.NPV.3 interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero (S)
25	Written addition and subtraction (WAS)	Add 5-digit numbers using written column addition; subtract 5-digit numbers using written method (decomposition); check answers to subtractions using written column addition; solve subtractions of 4- and 5-digit numbers using written column subtraction or number line counting up	6	Geometry- properties of shapes	↑**Y6.GPS.2 recognise, describe and build simple 3-D shapes, including making nets
			5	Number-multiplication and division	**Y5.NMD.10 solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
			4	Number - addition and subtraction	↓**Y4.NAS.2 estimate and use inverse operations to check answers to a calculation (S)
			4	Number - number and place value	↓**Y4.NPV.1 count in multiples of 6, 7, 9, 25 and 1000 (S)
			4	Number-multiplication and division	↓**Y4.NMD.2 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers (S)
			5	Number - addition and subtraction	**Y5.NAS.1 add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
			5	Number - addition and subtraction	**Y5.NAS.4 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

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Wk	Strands	Weekly Summary	Yr	Domain	Attainment target
			5	Number - addition and subtraction	**Y5.NAS.2 add and subtract numbers mentally with increasingly large numbers (S)
26	Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP)	Identify factors and multiples, find factor pairs; revise equivalent fractions; compare and order fractions with related denominators; add fractions with same or related denominators, then convert answer into a mixed number; subtract fractions with same and related denominators, revise multiplying fractions by whole numbers	5	Number-multiplication and division	**Y5.NMD.1 identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
			5	Number-fractions	**Y5.NF.2 identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
			5	Number-fractions	**Y5.NF.4 add and subtract fractions with the same denominator and denominators that are multiples of the same number
			5	Number-fractions	**Y5.NF.3 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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]
			5	Number-fractions	**Y5.NF.5 multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
			6	Number-fractions	↑**Y6.NF.1 use common factors to simplify fractions; use common multiples to express fractions in the same denomination
			4	Number-fractions	↓**Y4.NF.2 count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten (S)
			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks (S)
27	Written multiplication and division (WMD)	Use short division to divide 3-digit numbers by 1-digit numbers and 4-digit numbers by 1-digit numbers, including those which leave a remainder; express a remainder as a fraction; use long multiplication to multiply 3-digit and 4-digit numbers by teens numbers	5	Number-multiplication and division	**Y5.NMD.6 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
			4	Number - addition and subtraction	↓**Y4.NAS.2 estimate and use inverse operations to check answers to a calculation
			5	Number-multiplication and division	**Y5.NMD.4 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
			5	Measurement	**Y5.M.2 understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints (S)
			5	Number-multiplication and division	**Y5.NMD.7 multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 (S)
28	Measurement (MEA)	Find the area and perimeter of squares and rectangles by calculation and pursue a line of enquiry; estimate and find the area of irregular shapes; calculate	4	Measurement	↓**Y4.M.2 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
			5	Measurement	**Y5.M.4 calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm ²) and square metres (m ²) and estimate the area of irregular shapes

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Wk	Strands	Weekly Summary	Yr	Domain	Attainment target
		the perimeter and area of composite shapes; use the relations of area and perimeter to find unknown lengths; begin to understand the concept of volume; find the volume of a cube or cuboid by counting cubes; understand volume as measurement in three dimensions; relate volume to capacity; recognise and estimate volumes	5	Measurement	**Y5.M.3 measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
			5	Measurement	*Y5.M.5 estimate volume [for example, using 1 cm ³ blocks to build cuboids (including cubes)] and capacity [for example, using water]
			4	Geometry - position and direction	↓**Y4.GPD.3 plot specified points and draw sides to complete a given polygon (S)
			4	Measurement	↓**Y4.M.1 Convert between different units of measure [for example, kilometre to metre; hour to minute] (S)
			4	Number-fractions	↓**Y4.NF.7 find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredth (S)
			5	Measurement	**Y5.M.2 understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints (S)
			6	Number-fractions	↑**Y6.NF.6 associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] (S)
29	Decimals, percentages and their equivalence to fractions (DPE); Number and place-value (NPV)	Understand what percentages are, relating them to hundredths; know key equivalences between percentages and fractions, finding percentages of amounts of money; find equivalent fractions, decimals and percentages; solve problems involving fraction and percentage equivalents; write dates using Roman numerals	5	Number-fractions	**Y5.NF.11 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
			5	Number-fractions	*Y5.NF.12 solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{1}{5}$ and those fractions with a denominator of a multiple of 10 or 25
			5	Number-fractions	**Y5.NF.10 solve problems involving number up to three decimal places (S)
			5	Number - number and place value	**Y5.NPV.6 read Roman numerals to 1000 (M) and recognise years written in Roman numerals
30	Statistics (STA); Mental multiplication and division (MMD); Written multiplication and division (WMD); Number and place-value (NPV)	Find cubes of numbers to 10; draw and interpret line graphs showing change in temperature over time; begin to understand rate; use timetables using the 24-hour clock and use counting up to find time intervals of several hours and minutes; solve problems involving scaling by simple fractions; use factors to multiply; solve scaling problems involving measure	5	Number-multiplication and division	**Y5.NMD.8 recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
			5	Statistics	**Y5.S.1 solve comparison, sum and difference problems using information presented in a line graph
			5	Statistics	**Y5.S.2 complete, read and interpret information in tables, including timetables **Y5.M.6 solve problems involving converting between units of time
			4	Measurement	↓**Y4.M.5 read, write and convert time between analogue and digital 12- and 24-hour clocks
			5	Number-multiplication and division	**Y5.NMD.11 solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
			5	Number-multiplication and	**Y5.NMD.1 identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers



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Wk	Strands	Weekly Summary	Yr	Domain	Attainment target
				division	
			5	Number-fractions	**Y5.NF.8 round decimals with two decimal places to the nearest whole number and to one decimal place (S)
			4	Measurement	↓**Y4.M.6 solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (S)
			5	Number-multiplication and division	**Y5.NMD.5 multiply and divide numbers mentally drawing upon known facts (S)