Maths - Year 3 – Skills map

Number and Place Value

M1	I can count from 0 in multiples of 4, 8, 50 and 100.	
M2	I can calculate 10 or 100 more or less than a given number.	
M3	I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	
M4	I can compare and order numbers up to 1000.	
M5	I can identify, represent (using different representations) and estimate numbers.	
M6	I can read and write numbers up to 1000 in numerals and in words.	
M7	I can solve number problems and practical problems involving the above ideas.	

Multiplication and division

M18	I can understand and recall the 3-times table.	
M19	I can recall and use the 4-times table.	
M20	I can recall and use the 8-times table.	
M21	I am able to understand the relationship between multiplication and division and that it is commutative.	
M22	I can write and calculate mathematical statements for multiplication and division using multiplication tables.	
M23	I can solve problems, including missing number problems, involving multiplication and division.	

Addition and subtraction

M8	I can add and subtract three digit numbers to and from ones mentally.	
M9	I can add and subtract three digit numbers to and from multiples of 10 mentally.	
M65	I can add and subtract three digit numbers to and from multiples of 100 mentally.	
M10	I can add 3 digit numbers to one digit numbers, using formal written method of column addition.	
M11	I can add 3 digit numbers to multiples of 10, using formal written method of column addition.	
M12	I can add 3 digit numbers to multiples of 100, using formal written method of column addition.	
M13	I can subtract one digit numbers from three digit numbers, using formal written method of column subtraction.	
M14	I can subtract multiples of 10 from 3 digit numbers, using formal written method of column subtraction.	
M15	I can subtract multiples of 100 from 3 digit numbers, using formal written method of column subtraction.	
M16	I can estimate the answer to a calculation and use inverse operations to check answers.	
M17	I can solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.	

Fractions, decimals and percentages

M51	I can recognise that tenths come from dividing an object into 10 equal parts.	
M52	I can count up and down in tenths.	
M53	I can recognise unit fractions and non-unit fractions with small denominators.	
M54	I can recognise and write fractions as a set of objects.	
M55	I can recognise and show (using diagrams) equivalent fractions with small denominators.	
M56	I can add and subtract fractions with the same denominator within one whole (for example, 5/7 + 1/7 = 6/7).	
M57	I can compare and order unit fractions with the same denominator.	
M58	I can solve problems that involve all of the above.	

Statistics

M45	I can interpret and present data using bar charts.	
M46	I can solve one-step and two-step questions using information presented in scaled bar charts.	
M47	I can interpret and present data using pictograms.	
M48	I can solve one-step and two-step questions using information presented in pictograms.	
M49	I can interpret and present data using tables.	
M50	I can solve one-step and two-step questions using information presented in tables.	

Maths - Year 3 – Skills map

Measurement - Time

M36	I can <u>read</u> and <u>write</u> the time from a **12 hour analogue clock**.	
M37	I can <u>read</u> and <u>write</u> the time from an analogue clock, writing it in **24 hour time.**	
M38	I can <u>read</u> and <u>write</u> the time from an analogue clock with Roman numerals from I to XII making out the numbers.	
M39	I can <u>estimate</u> and <u>read</u> time with increasing accuracy to the nearest minute.	
M40	I can <u>record</u> and <u>compare</u> time in seconds, minutes and hours.	
M41	I can <u>understand</u> how many **seconds** in a **minute**.	
M42	I can <u>understand</u> how many **days** in a **month**.	
M43	I can <u>understand</u> how many **days** in a **year and leap year**.	
M44	I can <u>compare</u> **durations of events** (for example to calculate the time taken by particular events or tasks).	

Geometry – properties of shape

Angles

M59	I can <u>recognise</u> angles as a property of shape or a description of a turn.	
M60	I can <u>identify</u> **right angles**, recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn.	
M61	I can <u>identify</u> whether angles are **greater than** or **less than** a right angle.	

Lines and shapes

M62	I can <u>identify</u> **horizontal** and **vertical lines** and **pairs of perpendicular** and **parallel** lines.	
M63	I can <u>draw</u> **2-D shapes** and make **3-D shapes** using modelling materials.	
M64	I can <u>recognise</u> **3D shapes** in different orientations and describe them.	

Addition and subtraction

M24	I can <u>measure</u> **lengths** in meters (m) centimetres (cm) and millimetres (mm).	
M25	I can <u>compare</u> **lengths** written in meters (m) centimetres (cm) and millimetres (mm).	
M26	I can <u>add</u> and <u>subtract</u> **lengths** written in meters (m) centimetres (cm) and millimetres (mm).	

Perimeter of figures

M27	I can <u>measure</u> and <u>calculate</u> the **perimeter** of a simple 2D shape in centimetres and meters.	

Mass

M28	I can <u>measure</u> the **mass** of objects by reading weighing scales in grams (g) and kilograms (kg).	
M29	I can <u>compare</u> the **mass** of objects in grams (g) and kilograms (kg).	
M30	I can <u>add</u> and <u>subtract</u> the **mass** of objects written in grams (g) and kilograms (kg).	

Volume

M31	I can <u>measure</u> the **volume** and **capacity** of objects in litres (l) and millilitres (ml).	
M32	I can <u>compare</u> the **volume** and **capacity of objects** in litres (l) and millilitres (ml).	
M33	I can <u>add</u> and <u>subtract</u> the **volume** and **capacity** of objects in litres (l) and millilitres (ml).	

Money

M34	I can <u>add</u> and <u>subtract</u> **amounts of money** in both pounds (£) and pennies (p).	
M35	I can use addition and subtraction skills to <u>calculate change</u> in both pounds (£) and pennies (p).	

Maths - Year 4 – Skills map

Number and Place Value

M1	I can count in multiples 25 and 100.	
M2	I can count in multiples of 1000.	
M3	I can count in multiples of 6, 7 and 9.	
M4	I can calculate 1000 more or less than a given number.	
M5	I can count backwards through zero to include negative numbers.	
M6	I can recognise the place value of each digit in a four-digit number.	
M7	I can order and compare numbers beyond 1000.	
M8	I can identify how to round any number to the nearest 10.	
M9	I can identify how to round any number to the nearest 100.	
M10	I can identify how to round any number to the nearest 1000.	
M11	I can solve number and practical problems with increasingly large positive numbers.	

Roman Numerals

M12	I can read Roman Numerals to 100.	

Addition and subtraction

M13	I can add and subtract numbers with up to 4 digits using the formal written methods.	
M14	I can estimate and use inverse operations to check answers to a calculation.	
M15	I can solve addition and subtraction two-step problems in contexts.	

Multiplication and division

M16	I can recall multiplication and division facts for multiplication tables up to 12 x 12.	
M17	I can use place value and known and derived facts to multiply and divide mentally.	
M18	I can mentally multiply and divide by 0 and 1.	
M19	I can mentally multiply 3 numbers together.	
M20	I can recognise and use factor pairs and commutativity in mental calculations.	
M21	I can multiply two-digit numbers by a one-digit number using the formal written methods.	
M22	I can multiply three-digit numbers by a one-digit number using the formal written methods.	
M23	I can solve problems involving multiplying and dividing, including using the distributive law.	
M24	I can solve problems involving integer scaling. For example if one apple cost £1.20 how much does 6 apples cost?	
M25	I can solve harder problems such as n objects are connected to m objects. For example: a packet of balls contains 2 footballs and 3 rugby balls. Hr Harrison bought some new balls, when he opened the bag, there were 16 footballs. How many footballs were there?	

Fractions

M26	I can recognise and show, using diagrams, families of common equivalent fractions.	
M27	I can recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	
M28	I can count up and down in hundredths.	
M29	I can solve problems which involve increasingly harder fractions to calculate quantities.	
M30	I can to use fractions to divide quantities, including non-unit fractions where the answer is a whole number.	
M31	I can add and subtract fractions with the same denominator.	

Decimals

M32	I can recognise and write decimal equivalents of any number of tenths or hundredths.	
M33	I can recognise and write decimal equivalents to quarters, a half and thirds.	
M34	I can find the effect of dividing a one or two-digit numbers by 10 and 100, identify the value of digits in the answer as ones, tenths and hundredths.	
M35	I can round decimals with one decimal place to the nearest whole number.	
M36	I can compare numbers with the same number of decimal places up to 2 decimal places.	
M37	I can solve simple measure and money problems involving fractions and decimals to 2 decimal places.	

Maths - Year 4 – Skills map

Geometry

Properties of shape

M38	I can **identify** acute and **obtuse** angles.	
M39	I can **compare** and **order** angles, by size, up to 180°.	
M40	I can **compare** and **classify triangles**, based on their properties and sizes.	
M41	I can **construct** and **classify quadrilaterals** based on their properties and size.	
M42	I can **identify** the lines of symmetry in 2-D shapes presented in different orientations.	
M43	I can **construct** a simple **symmetric figure** with respect to a specific line of symmetry.	

Position and movement

M44	I can **describe** positions of a 2-D shape as co-ordinates in the first quadrant.	
M45	I can **describe** movements between positions as **translations** of a given unit to the left or right and up or down.	
M46	I can **plot** specific points and **draw** sides to complete a given **polygon**.	

Measurement

M52	I can **convert** between different **units of measure**, for example, km to m.	
M53	I can **measure** and calculate the **perimeter** of a **rectilinear** figure in cm and m.	
M54	I can **calculate** the **area** of rectilinear shapes by counting squares.	

Money

M55	I can **estimate** and **calculate** different measures, including money in pounds and pence.	
M56	I can **compare** different measures, including money in pounds and pence.	

Time

M57	I can **read** and **write** time as analogue and digital 12-hour clocks.	
M58	I can **read** and **write** time as analogue and digital 24-hour clocks.	
M59	I can **solve** problems involving **converting** from hours to minutes; minutes to seconds; years to months and weeks to days.	

Statistics

M47	I can **interpret** data using appropriate graphical methods, including bar chats and time graphs.	
M48	I can **present** data using appropriate graphical methods, including bar chats and time graphs.	
M49	I can **solve** comparison, problems using information presented in a bar charts, pictograms, tables and other graphs.	
M50	I can **solve** sum, problems using information presented in a bar charts, pictograms, tables and other graphs.	
M51	I can **solve** difference , problems using information presented in a bar charts, pictograms, tables and other graphs.	

Maths - Year 5 – Skills map

Number and Place Value		
M1	I can read and write numbers to at least 1,000,000.	
M2	I can identify the value of each digit in numbers up to 1,000,000.	
M3	I can order and compare numbers to at least 1,000,000.	
M4	I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.	
M5	I can count forwards and backwards with positive and negative whole numbers, including through zero.	
M6	I can interpret negative numbers in context.	
M7	I can identify how to round any number up to 1 million to the nearest 10.	
M8	I can identify how to round any number up to 1 million to the nearest 100.	
M9	I can identify how to round any number up to 1 million to the nearest 1000.	
M10	I can identify how to round any number up to 1 million to the nearest 10,000.	
M11	I can identify how to round any number up to 1 million to the nearest 100,000.	
M12	I can solve number problems and practical problems that involve all of above.	
M13	I can read Roman Numerals to 1000.	
M14	I can recognise years written in Roman Numerals.	

Addition and subtraction		
M15	I can add whole numbers with more than 4 digits, using a formal written method.	
M16	I can subtract whole numbers with more than 4 digits, using a formal written method.	
M17	I can add and subtract numbers mentally with increasingly large numbers.	
M18	I can use rounding to check answers to calculations and determine levels of accuracy.	
M19	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	

Measurement		
M35	I can convert between different units of metric measure. (For example: kilometres and metres; centimetres and metres; grams and kilograms; litres and millilitres)	
M36	I can understand and use approximate equivalences between metric units and common imperial units such as inches, ponds and pints.	
M37	I can measure and calculate the perimeter of composite rectilinear shapes in cm and metres.	
M38	I can calculate and compare the area of rectangles and use standard units including square cm (cm²) and square metres (m²).	
M39	I can estimate the area of irregular shapes.	
M40	I can estimate volume, for example, using 1cm³ blocks to build cuboids.	
M41	I can estimate capacity, for example, using water.	
M42	I can solve problems involving converting between units of time.	
M43	I can use all four operations to solve problems involving measure using decimal notation, including scaling.	

Multiplication and division		
M20	I can identify multiples of a given number.	
M21	I can identify factors, including finding all factor pairs of a number.	
M22	I can identify common factors of two numbers.	
M23	I can identify and use the vocabulary of prime numbers, prime factors and composite numbers.	
M24	I can investigate whether a number up to 100 is prime.	
M25	I can recall prime numbers up to 19.	
M26	I can multiply two-digit and three-digit numbers by a one-digit number.	
M27	I can multiply two-digit and three-digit numbers by a two-digit number using the formal written method of long multiplication.	
M28	I can multiply and divide numbers mentally drawing upon known facts.	
M29	I can divide numbers up to 4 digits by a one-digit number using the formal written method of short division.	
M30	I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.	
M31	I can recognise and use square and cube numbers. As well as recognising the notation for squared (²) and cubed (³).	
M32	I can solve problems involving x and ÷ including using my knowledge of factors and multiples, squares and cubes.	
M33	I can solve problems involving +, -, x and ÷. Understand the meaning of the equals (=) sign.	
M34	I can solve problems involving x and ÷, including scaling by simple fractions and problems involving simple rates.	

Maths - Year 5 – Skills map

Fractions

M44	I can compare and order fractions whose denominators are all multiples of the same number.
M45	I can identify, name and write equivalent fractions of a given fraction.
M46	I can recognise mixed numbers and improper fractions and convert from one form to the other, writing statements >1 as a mixed number. For example $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$
M47	I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.
M48	I can multiply proper fractions and mixed numbers by whole numbers.

Decimals

M49	I can read and write decimal numbers as fractions.
M50	I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
M51	I can identify how to round decimals with two decimal places to the nearest whole number.
M52	I can identify how to round decimals with two decimal places to one decimal place.
M53	I can read and write numbers with up to three decimal places.
M54	I can order and compare numbers with up to three decimal places.
M55	I can solve problems involving numbers up to three decimal places.

Percentages

M56	I can recognise the percent symbol (%) and understand that 'per-cent' relates to 'number of parts per hundred'.
M57	I can write percentages as a fraction with the denominator 100.
M58	I can write percentages as a decimal.
M59	I can solve problems which require knowing percentages and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}$ and $\frac{4}{5}$ and those fractions with a denominator that is a multiple of 10 or 25.

Geometry: properties of shape

M60	I can identify 3-D shapes, including cubes and other cuboids from 2-D representations (nets).
M61	I can understand that angles are measured in degrees (°).
M62	I can estimate and compare acute, obtuse and reflex angles.
M63	I can draw given angles and measure them in degrees.
M64	I can identify missing angles around a point/whole turn (total 360°).
M65	I can identify missing angles on a straight line/half turn (total 180°).
M66	I can identify other multiples of 90°.
M67	I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
M68	I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Geometry: Position and movement

M69	I can identify, describe and represent the position of a shape following a reflection or translation.

Chapter 5—Statistics

M70	I can solve comparison, sum and difference problems using information presented in a line graph.
M71	I can complete, read and interpret information in tables, including timetables.

Maths - Year 6 – Skills map

Number and Place Value

M1	I can read and write numbers up to 10 000 000.
M2	I can order and compare numbers up to 10 000 000.
M3	I can determine the value of each digit in numbers up to 10 000 000.
M4	I can identify how to round any number to a required degree of accuracy.
M5	I can apply negative numbers in context and calculate intervals across zero.
M6	I can solve number and practical problems that involve all of the above.

Algebra

M33	I can use simple formulae.
M34	I can generate and describe linear number sequences.
M35	I can express missing number problems algebraically.
M36	I can calculate pairs of numbers that satisfy an equation with two unknowns.
M37	I can enumerate (express the number of) possibilities of combinations of two variables.

Addition, subtraction, multiplication and division

M7	I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.	
M8	I can divide numbers up to 4 digits by two-digit whole numbers using the formal written method of long division.	
M9	I can interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.	
M10	I can divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.	
M11	I can perform mental calculations, including using mixed operations and large numbers.	
M12	I can identify common factors, common multiples and prime numbers.	
M13	I can apply my knowledge of the order of operations to carry out calculations involving the four operations (BIDMAS).	
M14	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	
M15	I can solve problems involving addition, subtraction, multiplication and division.	
M16	I can apply my knowledge of estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.	
M17	I can multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.	
M18	I can multiply one-digit numbers with up to two decimal places by whole numbers.	
M19	I can apply written division methods in cases where the answer has two decimal places.	

Fractions, decimals and percentages

M20	I can apply your understanding of common factors to simplify factions.	
M21	I can apply your understanding of common multiples to express fractions in the same denomination.	
M22	I can compare and order fractions, including fractions > 1.	
M23	I can add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions.	
M24	I can multiply simple pairs of proper fractions, writing the answer in its simplest form.	
M25	I can divide proper fractions by whole numbers.	
M26	I can connect fractions with division and calculate decimals fraction equivalents.	
M27	I can identify the value of each digit in numbers given to three decimal places.	
M31	I can solve problems which require answers to be rounded to specified degrees of accuracy.	
M32	I can recall and apply equivalences between simple fractions, decimals and percentages, including in different contexts.	

Maths - Year 6 – Skills map

Measurement

M38	I can <u>solve</u> problems involving calculation and **conversation** of **units of measure**, using decimal notation up to three decimal places where appropriate.	
M39	I can <u>apply</u>, <u>read</u>, <u>write</u> and <u>convert</u> between **standard units**.	
M40	I can <u>convert</u> measurements of **length**, **mass**, **volume** and **time** from a smaller unit of measure to a larger unit and vice versa.	
M41	I can <u>convert</u> between **miles** and **kilometres**.	
M42	I can <u>recognise</u> that shapes with the same **areas** can have different **perimeters** and vice versa.	
M43	I can <u>recognise</u> when it is possible to use formulae for area and volume of shapes.	
M44	I can <u>calculate</u> the area of **parallelograms** and **triangles**.	
M45	I can <u>calculate</u>, <u>estimate</u> and <u>compare</u> volume of cubes and **cuboids** using standard units, including **cubic centimetres (cm³)** and **cubic metres (m³)**.	

Geometry: properties of shape

M46	I can <u>draw</u> **2-D shapes using given dimensions** and **angles**.	
M47	I can <u>recognise</u>, <u>describe</u> and build simple **3-D shapes**, including making **nets**.	
M48	I can <u>compare</u> and <u>classify</u> **geometric shapes** based on their properties and sizes.	
M49	I can <u>calculate</u> unknown angles in any **triangles**, **quadrilaterals** and **regular polygons**.	
M50	I can **illustrate** and name parts of circles, including **radius**, **diameter** and **circumference**. Know that the diameter is twice the radius.	
M51	I can <u>recognise</u> that angles, where they meet at a point, are on a straight line or are **vertically opposite**.	
M52	I can <u>calculate</u> missing angles.	

Chapter 13—Geometry: position and direction.

M53	I can <u>describe</u> positions on the full coordinate grid (all four **quadrants**).	
M54	I can <u>draw</u> and **translate** simple shapes on the coordinate plane.	
M55	I can <u>draw</u> and **reflect** simple shapes in the **axes**.	

Statistics

M56	I can <u>interpret</u> and <u>construct</u> **pie charts** and use these to solve problems.	
M57	I can <u>interpret</u> and <u>construct</u> **line graphs** and use these to solve problems.	
M58	I can **calculate** and interpret the **mean** as an **average**.	

Ratio and proportion

M59	I can <u>solve</u> problems involving **relative size** of two quantities, where missing values can be found by using **integer** multiplication and division facts.	
M60	I can <u>solve</u> problems involving the calculation of percentages and the use of percentages for comparison.	
M61	I can <u>solve</u> problems involving similar shapes where the **scale factor** is known or can be found.	
M62	I can <u>solve</u> problems involving unequal sharing and grouping, using knowledge of fractions and multiples.	