

**Maths
Learning
Ladders
Year 5.**

Times Tables: 4.3

I can recall quickly all the multiplication and division facts for tables up to 12x12 and can use them confidently in larger calculations.

Addition 6.9

I can add increasingly large numbers mentally.

Addition 7.1

I can add large numbers in different contexts using vertical addition.

Addition 7.2

I can use rounding to estimate and check answers to calculations.

Addition: 7.3

I can add a mix of whole numbers and decimals with different numbers of decimal places using vertical addition.

Subtraction 9.7

I can subtract large numbers in different contexts using vertical subtraction.

Subtraction 9.8

I can use rounding to check answers to calculations.

Subtraction 9.9

I can subtract a mix of whole numbers and decimals with different numbers of decimal places using vertical subtraction.

Multiplication 11.2

I can use a formal vertical method to multiply HTP, THHTO and whole numbers with up to 2 decimal places (e.g. money) by 0.

Multiplication 11.3

I can use related facts to multiply multiples of 10 and 100 e.g. $2 \times 3 = 6$ $20 \times 30 = 600$.

Multiplication 11.4

I can multiply TOxTO using diagrams arrays and grids.

Multiplication 11.5

I can multiply TOxTO using a grid.

Multiplication: 11.6

I can multiply TOxTO using long multiplication.

Multiplication 11.7

I can identify multiples and factors of a number and common factors of two numbers.

Division 13.8

I can divide 4 digit and 4 digit numbers by one digit using short division.

Division: 13.9

I can solve more complex problems involving division including with remainders and round the answer appropriately in context.

Division 14.1

I can begin to represent a remainder as a fraction or decimal.

Fractions: 16.7

I can recognise and convert improper fractions to mixed numbers.

Fractions: 16.8

I can add and subtract fractions with the same denominators including recognising and converting improper fractions to mixed numbers.

Fractions: 16.9

I can compare and order fractions where denominators are in the same fraction family.

Fractions: 17.1

I can add and subtract fractions with denominators in the same fraction family.

Fractions: 17.2

I can multiply proper fractions and mixed numbers by a whole number using diagrams and concrete apparatus.

Decimals: 20.1

I can compare and order whole numbers and decimals with up to 2 decimal places.

Decimals: 20.2

I can round decimals with 2 decimal places to the nearest whole number and to one decimal place.

Decimals 20.3

I can recognise and use thousandths and relate them to tenths, hundredths and decimal places.

Decimals 20.4

I can read, write order and compare numbers that have a mixture of 1, 2 or 3 decimal places.

Percentage and Ratio: 22.1

I can recognise and understand % as part of 100 and write a % as a fraction and a decimal.

Problem Solving: 25.4

I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Problem Solving: 25.5

I can solve addition and subtraction multi-step problems in context, deciding which operations to use and why.

<p><u>Problem Solving: 25.6</u> I can solve division problems interpreting remainders in a context and adjusting the answer appropriately.</p>	<p><u>Problem Solving: 25.7</u> I can solve problems involving multiplication and division including scaling by simple fractions.</p>	<p><u>Problem Solving: 25.8</u> I can solve multi step problems involving a combination of any of the 4 operations.</p>	<p><u>Problem Solving: 25.9</u> I can use all 4 operations to solve equivalence statements (.g. $5 \times 7 = 18 + 12$)</p>	<p><u>Problem Solving: 26.1</u> I can investigate a problem involving place value and properties of number and present my investigation in a clear and organised way.</p>
<p><u>Properties of Number 27.5</u> I can identify multiples and factors including finding all factor pairs of a number and common factors of two numbers.</p>	<p><u>Properties of Number 27.6</u> I know and use the vocabulary of prime numbers, prime factors and composite non prime numbers.</p>	<p><u>Properties of Number 27.7</u> I can work out if a number up to 100 is a prime number and have quick recall of all the prime numbers to 19.</p>	<p><u>Properties of Number: 27.8</u> I can recognise and describe linear number sequences including those involving fractions and decimals and find the term to term rule. E.g. add half.</p>	<p><u>Properties of Number 27.9</u> I can recognise squared and cubed numbers and use the correct notation.</p>
<p><u>Measures: 31.2</u> I can convert between different units of measure using my understanding of times and divide by 10, 100 and 1000.</p>	<p><u>Measures: 31.2</u> I can use all 4 operations to solve problems involving length, mass, capacity and scaling.</p>	<p><u>Measures: 31.3</u> I can estimate volume and capacity and explore these concepts using practical materials.</p>	<p><u>Measures: 31.4</u> I can understand and use approximate equivalences between metric units and common imperial units (inches, pounds and pints.)</p>	<p><u>Time: 35.1</u> I can solve problems which involve converting between units of time e.g. expressing the answer as days and weeks.</p>
<p><u>Time: 35.2</u> I can solve problems involving time including reading simple timetables.</p>	<p><u>Perimeter and Area 36.5</u> I can measure and calculate the perimeter of shapes that need to be divided into rectangles (composite rectilinear shapes) in cm and m.</p>	<p><u>Perimeter and Area 36.6</u> I can measure and calculate the area of shapes that need to be divided into rectangles (composite and rectilinear shapes) in cm^2 and m^2</p>	<p><u>Perimeter and Area 36.7</u> I can estimate the area of irregular shapes.</p>	<p><u>Perimeter and Area 36.8</u> I can calculate and compare the area of rectangles using in cm^2 and m^2 including from scale drawings.</p>
<p><u>Perimeter and Area 36.9</u> I can find unknown lengths on rectilinear shapes using my understanding of perimeter and area.</p>	<p><u>Statistics 39.7</u> I can complete, read and interpret information presented in tables and other graphical representations.</p>	<p><u>Statistics: 39.8</u> I can decide which representations of data are most appropriate and explain why.</p>	<p><u>Statistics: 39.9</u> I can interpret a pie chart.</p>	<p><u>Shape 43.1</u> I can draw and measure given angles in degrees.</p>
<p><u>Shape 43.2</u> I can identify regular and irregular shapes using my knowledge of length of sides and angles.</p>	<p><u>Shape: 43.3</u> I can identify 3D shapes from 2D representations.</p>	<p><u>Shape: 43.4</u> I can calculate missing angles on a straight line (180 or at a point (360) or within a right angle (90).</p>	<p><u>Shape: 43.5</u> I can find missing lengths and angles in rectangles using my knowledge of related facts.</p>	<p><u>Shape: 43.6</u> I can find missing lengths and angles in rectangles using my knowledge of related facts.</p>

Position and Direction 45.9
I can identify, describe and draw the position of a shape on a grid after a reflection on a line parallel to the axis.

Position and Direction 46.1
I can identify, describe and draw the position of s shape on a grid after a translation.

Place Value: 49.1
I can read write, order and compare numbers to 1,000,000 (1 million) and determine the value of each digit.

Place Value: 49.2
I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.

Place Value: 49.3
I can count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000

Place Value: 49.4
I can interpret negative numbers in context.