

Year 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Place value		Addition and subtraction		Multiplying by 10,100 and 1000.	Dividing by 10,100 and 1000.	Multiplication
Objectives	To read and represent numbers to 100,000. To read and represent numbers to 1,000,000. To compare whole numbers to 1,000,000 using place value (using similar digits). Different representations. To count forwards and backwards in powers of 10 from any number up to 1,000,000.	Round numbers to the nearest 10 Round numbers to the nearest 100. Round numbers to the nearest 1000. Round numbers to the nearest whole number. Arithmetic paper.	To mentally calculate with large numbers (only changing one digit at a time). To add using the counting on strategy with concrete materials. To subtract using the counting backwards strategy with concrete materials. To add and subtract numbers within 1000 using rounding and concrete materials.	To add numbers within 1,000,000 using column addition. To subtract numbers using column subtraction. (Ensure worded problems are embedded in these lessons). Arithmetic paper.	Multiply by 10 including decimals. Multiply by 100 including decimals. Multiply by 1000 including decimals. Multiply numbers mentally using known facts such as $40 \times 3 = 120$ as $3 \times 3 = 12$.	Divide by 10 including decimals. Divide a one digit number by 100 including decimals. Divide by 1000 including decimals. Divide numbers mentally using known facts such as $40 \times 3 = 120$ as $3 \times 3 = 12$.	Multiply by a two digit number by a one digit number using a formal written method (expanded method). Multiply up to 4 digits by a one digit number using the formal written method. (Ensure worded problems are embedded in these lessons).

Year 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 2	Division	Fractions		Assessment week	Time	Statistics	Measurements
Objectives	Divide a four-digit number by a one-digit number using the formal written method (1 digit carries only). Divide a four-digit number by a one-digit number using the formal written method (any carries). Divide a four-digit number by a one-digit number using the formal written method (any carries and remainders).	Identify equivalent fractions using shapes, including the relationship between halves, thirds, quarters, sixths and twelfths. Use a fraction wall to identify equivalent fractions. Identify equivalent fractions using multiplication knowledge such as doubling. (Children can explain why fractions are equivalent).	Draw mixed and improper fractions using shapes. Convert mixed fractions to improper fractions. Convert improper fractions to mixed fractions.		Read, write and convert time between analogue and digital. Convert from larger to smaller units of time. Duration of time problems. Minutes and hours – How many when converting.	Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information from a table including timetables.	Count forwards and backwards in positive and negative whole numbers. Measuring with degrees. (Temperatures including negative numbers in context).

Year 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Spring term 1	Rounding	Fractions, decimals and percentages.			Measurement	
Objectives	Round numbers to the nearest 10 Round numbers to the nearest 100. Round numbers to the nearest 1000. Round numbers to the nearest whole number.	Identify common multiples of two numbers. Compare fractions with different denominators (common multiple given). Compare fractions with different denominators (common multiple not given). Add fractions with different denominators. (2 lessons)	Subtract fractions with different denominators. (2 lessons) Understand that the % symbol means parts per 100. Convert any percentage to equivalent decimal and fraction and understand these are equal.	Recognise and write decimal equivalents of any number of tenths such as $\frac{1}{4}$, $\frac{1}{2}$. Write decimal numbers as fractions. Write fractions as decimals including thousandths such $\frac{47}{1000} = 0.047$. Can relate improper fractions to decimal equivalents such as $\frac{3087}{1000} = 3.087$.	Estimating and converting millilitres to litres, kilograms to grams, centimetres to metres. (Ensure worded problems are embedded).	Comparing measures. Imperial measurements. Scaling (when amending recipes).

Year 5	Week 1	Week 2	Week 3	Week 4	Week 5
Spring term 2	All four operations (recap)		Shape		Area and perimeter
Objectives	To mentally calculate with large numbers (only changing one digit at a time). To add using the counting on strategy with concrete materials. To subtract using the counting backwards strategy with concrete materials. To add and subtract numbers within 1000 using rounding and concrete materials. To add numbers within 1,000,000 using column addition. To subtract numbers using column subtraction.	Multiply by a two digit number by a one digit number using a formal written method (expanded method). Multiply up to 4 digits by a one digit number using the formal written method. Divide a four-digit number by a one-digit number using the formal written method (1 digit carries only). Divide a four-digit number by a one-digit number using the formal written method (any carries). Divide a four-digit number by a one-digit number using the formal written method (any carries and remainders).	Estimate and identify the angles. Find missing angles in a shape. Draw shapes with sides measured to the nearest millimetre. Regular and irregular polygons Identify 3D shapes from 2D representations. (nets).	Assessment week	Measure and calculate the perimeter of composite rectilinear shapes in a practical manner. Measure and calculate the perimeter of composite rectilinear shapes (drawing). Area of squares and rectangles (recap) Area of composite shapes

Year 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Summer term 1	Coordinates, translation and reflection		Fractions (recap).			Factors	Prime and squared numbers.
Objectives	Identify the coordinates of an incomplete shape (include regular shapes with missing coordinates) Translate shapes across the coordinate grid. Reflect shapes across the coordinate grid Identify and use notation for parallel and perpendicular lines		Identify and write equivalent fractions using multiplication knowledge. Simplify fractions. Convert between any percentage, decimal and fraction and write the equivalents of each.	Compare fractions with different denominators using a written method. Add and subtract fractions with denominators that are multiples of the same number using a written method.	New learning – multiplying fractions. New learning – percentages of amounts.	To define and fine common factors of numbers to 100.	To identify and name the prime numbers to recognise prime numbers as numbers that only have 2 factors. To create and determine square and cubed numbers.

Year 6	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Summer term 2	Calculations – recap all 4 operations.		Assessment week	Coordinates, translation and reflection		Area and perimeter	BODMAS
Objectives	To mentally calculate with large numbers (only changing one digit at a time). To add using the counting on strategy with concrete materials. To subtract using the counting backwards strategy with concrete materials. To add and subtract numbers within 1000 using rounding and concrete materials. To add numbers within 1,000,000 using column addition. To subtract numbers using column subtraction.	Multiply by a two digit number by a one digit number using a formal written method (expanded method). Multiply up to 4 digits by a one digit number using the formal written method. Divide a four-digit number by a one-digit number using the formal written method (1 digit carries only). Divide a four-digit number by a one-digit number using the formal written method (any carries). Divide a four-digit number by a one-digit number using the formal written method (any carries and remainders).		Identify the coordinates of an incomplete shape (include regular shapes with missing coordinates) Translate shapes across the coordinate grid. Reflect shapes across the coordinate grid Identify and use notation for parallel and perpendicular lines		Measure and calculate the perimeter of composite rectilinear shapes in a practical manner. Measure and calculate the perimeter of composite rectilinear shapes (drawing). Area of squares and rectangles (recap) Area of composite shapes	Simple order of operation involving brackets, e.g. $(4 + 5) - 2$ (answer: 7) Move on to more complex problems $(3 \text{ squared} + 3) \div 2$ And $(3 \times 4) + 12 - 5$

