Aston Tower Community Primary School

ACHIEVING EXCELLENCE

Maths
Medium Term Planning:
Years
1 to 6

Year 1: Autumn 1

Week	Date	Fluency Objectives	Main Maths Objectives
1		Read and write numbers from 1 to 20 in numerals and words. Number facts to 10	Represent and use number bonds and related subtraction facts within 20 Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least. Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs. Number facts to 10
2		Read and write numbers from 1 to 20 in numerals and words. Number facts to 10	Represent and use number bonds and related subtraction facts within 20 Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least. Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
3		Represent and use number bonds and related subtraction facts within 20	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least. Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
4		Count in multiples of twos, fives and tens.	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
5		Count, read and write numbers to 100 in numerals.	Recognise, find and name a half as one of two equal parts of an object, shape or quantity
6		Represent and use number bonds and related subtraction facts within 20	Recognise and name common 2-D shapes [e.g. rectangles (including squares), circles and triangles].
7		Assess and review	

Year 1: Autumn 2

Week	Date	Fluency Objectives	Main Maths Objectives
1		Read and write numbers from 1 to 20 in numerals and words.	Compare, describe and solve practical problems for: • lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] Measure and begin to record the following: • lengths and heights
2		Count in multiples of twos, fives and tens.	Recognize and know the value of different denominations of coins and notes.
3		Represent and use number bonds and related subtraction facts within 20	Compare, describe and solve practical problems for: • mass/weight [e.g. heavy/light, heavier than, lighter than] Measure and begin to record the following: • mass/weight
4		Recognise and use language relating to dates, including days of the week, weeks, months and years.	Compare, describe and solve practical problems for: • time [e.g. quicker, slower, earlier, later]. Sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].
5		Count, read and write numbers to 100 in numerals.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least..
6		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Compare, describe and solve practical problems for: • capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] Measure and begin to record the following: capacity and volume
7		Assess and review	

Year 1: Spring 1

Week	Date	Fluency Objectives	Main Maths Objectives
1		Count, read and write numbers to 100 in numerals and words.	Represent and use number bonds and related subtraction facts within 20 Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least. Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
2		Count, read and write numbers to 100 in numerals and words.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
3		Count in multiples of twos, fives and tens.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
4		Count in multiples of twos, fives and tens.	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
5		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Recognise and know the value of different denominations of coins and notes.
6		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
7		Assess and review	

Year 1: Spring 2

Week	Date	Fluency Objectives	Main Maths Objectives
1		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Compare, describe and solve practical problems for: • lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] Measure and begin to record the following: • lengths and heights
2		Count in multiples of twos, fives and tens.	Compare, describe and solve practical problems for: • mass/weight [e.g. heavy/light, heavier than, lighter than] Measure and begin to record the following: • mass/weight
3		Count in multiples of twos, fives and tens.	Compare, describe and solve practical problems for: • capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] Measure and begin to record the following: • capacity and volume
4		Compare, describe and solve practical problems for: • time [e.g. quicker, slower, earlier, later]. Measure and begin to record the following: • time (hours, minutes, seconds).	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
5		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Recognise and know the value of different denominations of coins and notes.
6		Recognise and name common 2-D shapes [e.g. rectangles (including squares), circles and triangles].	Recognise and name common 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].
7		Assess and review	

Year 1: Summer 1

Week	Date	Fluency Objectives	Main Maths Objectives
1		Count, read and write numbers to 100 in numerals and words.	Represent and use number bonds and related subtraction facts within 20 Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least. Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
2		Count, read and write numbers to 100 in numerals and words.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
3		Count in multiples of twos, fives and tens.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
4		Count in multiples of twos, fives and tens.	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
5		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Recognise and know the value of different denominations of coins and notes.
6		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
7		Assess and review	

Year 1: Summer 2

Week	Date	Fluency Objectives	Main Maths Objectives
1		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Compare, describe and solve practical problems for: • lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] Measure and begin to record the following: • lengths and heights
2		Count in multiples of twos, fives and tens.	Compare, describe and solve practical problems for: • mass/weight [e.g. heavy/light, heavier than, lighter than] Measure and begin to record the following: • mass/weight
3		Count in multiples of twos, fives and tens.	Compare, describe and solve practical problems for: • capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] Measure and begin to record the following: • capacity and volume
4		Compare, describe and solve practical problems for: • time [e.g. quicker, slower, earlier, later]. Measure and begin to record the following: • time (hours, minutes, seconds).	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
5		Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number.	Recognise and know the value of different denominations of coins and notes.
6		Recognise and name common 2-D shapes [e.g. rectangles (including squares), circles and triangles].	Recognise and name common 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].
7		Assess and review	

Year 2: Autumn 1

Week	Date	Fluency Objectives	Main Maths Objectives
			Use place value and number facts to solve problems. Identify, represent and estimate numbers using different representations, including the number line.
1		Read and write numbers to at least 100 in numerals and in words.	Add and subtract numbers mentally including: a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers. Solve problems with addition and subtraction using objects and pictorial representations, applying increasing knowledge. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
2		Recognise the place value of each digit in a two-digit number (tens and ones).	Add and subtract numbers using concrete objects and pictorial representations including: a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers. Solve problems with addition and subtraction using objects and pictorial representations, applying increasing knowledge. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
3		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.
4		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals ($=$) signs.
5		Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.	Recognise the equivalence of 2/4 and 1/2 Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity. Write a simple fraction, e.g. ½ of 6 = 3
6		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
7		Assess and review	

Year 2: Autumn 2

Week	Date	Fluency Objectives	Main Maths Objectives
1		Read and write numbers to at least 100 in numerals and in words. Recognise the place value of each digit in a two-digit number (tens and ones).	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels.
2		Know the number of minutes in an hour and the number of hours in a day.	Compare and sequence intervals of time.
3		Compare and order numbers from 0 up to 100; use <, > and = signs.	Compare and sort common 2-D shapes and everyday objects.
4		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
5		Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.	Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).
6		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.
7		Assess and review	

Year 2: Spring 1

Week	Date	Fluency Objectives	Main Maths Objectives Use place value and number facts to solve problems. Identify, represent and estimate numbers using different representations, including the number line.
1		Read and write numbers to at least 100 in numerals and in words.	Add and subtract numbers mentally including: a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers. Solve problems with addition and subtraction using objects and pictorial representations, applying increasing knowledge. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
2		Recognise the place value of each digit in a two-digit number (tens and ones).	Add and subtract numbers using concrete objects and pictorial representations including: a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers. Solve problems with addition and subtraction using objects and pictorial representations, applying increasing knowledge. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
3		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.
4		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals ($=$) signs.
5		Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.	Recognise the equivalence of 2/4 and 1/2 Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity. Write a simple fraction, e.g. ½ of 6 = 3
6		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
7		Assess and review	

Year 2: Spring 2

Week	Date	Fluency Objectives	Main Maths Objectives
1		Read and write numbers to at least 100 in numerals and in words. Recognise the place value of each digit in a two-digit number (tens and ones).	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels.
2		Know the number of minutes in an hour and the number of hours in a day.	Compare and sequence intervals of time.
3		Compare and order numbers from 0 up to 100; use <, > and = signs.	Compare and sort common 2-D shapes and everyday objects.
4		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
5		Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.	Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).
6		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.
7		Assess and review	

Year 2: Summer 1

Week	Date	Fluency Objectives	Main Maths Objectives Use place value and number facts to solve problems. Identify, represent and estimate numbers using different representations, including the number line.

1		Read and write numbers to at least 100 in numerals and in words.	Add and subtract numbers mentally including:
			
			    a two-digit number and ones
			    a two-digit number and tens
			    two two-digit numbers
			    adding three one-digit numbers.
			Solve problems with addition and subtraction using objects and pictorial representations, applying increasing knowledge.
			Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.

2		Recognise the place value of each digit in a two-digit number (tens and ones).	Add and subtract numbers using concrete objects and pictorial representations including:
			
			    a two-digit number and ones
			    a two-digit number and tens
			    two two-digit numbers
			    adding three one-digit numbers.
			Solve problems with addition and subtraction using objects and pictorial representations, applying increasing knowledge.
			Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.

3		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.
4		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals ($=$) signs.
5		Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.	Recognise the equivalence of 2/4 and 1/2 Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity. Write a simple fraction, e.g. ½ of 6 = 3
6		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
7		Assess and review	

Year 2: Summer 2

Week	Date	Fluency Objectives	Main Maths Objectives
1		Read and write numbers to at least 100 in numerals and in words. Recognise the place value of each digit in a two-digit number (tens and ones).	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels.
2		Know the number of minutes in an hour and the number of hours in a day.	Compare and sequence intervals of time.
3		Compare and order numbers from 0 up to 100; use <, > and = signs.	Compare and sort common 2-D shapes and everyday objects.
4		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
5		Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.	Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).
6		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.
7		Assess and review	

Year 3: Autumn 1

Week	Date	Fluency Objectives	Main Maths Objectives • Solve number and practical problems • Identify, represent and estimate numbers using different representations. • Estimate the answer to a calculation, and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.
1		Recognise the place value of each digit in a three-digit number (hundreds, tens and ones). Read and write numbers to 1000 in numerals and words.	Add numbers with up to three digits, using formal written methods of columnar addition.
2		Compare and order numbers up to 1000	Subtract numbers with up to three digits, using formal written methods of columnar subtraction.
3		Count from 0 in multiples of 4, 8, 50 and 100	Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
4		Recall and use multiplication and division facts for the 3, 4, and 8 multiplication tables.	Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
5		Find 10 or 100 more or less than a given number. Add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds.	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. Recognise and show, using diagrams, equivalent fractions with small denominators.
6		Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	Compare and order unit fractions and fractions with the same denominators. Add and subtract fractions with the same denominator within one whole [e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] Solve problems that involve fractions
7		Assess and review	

Year 3: Autumn 2

Week	Date	Fluency Objectives	Main Maths Objectives • Solve number and practical problems • Identify, represent and estimate numbers using different representations. • Estimate the answer to a calculation, and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.
1		Compare lengths (m/cm/mm). Compare mass (kg/g). Compare volume/capacity (l/ml).	Measure lengths (m/cm/mm). Measure mass (kg/g). Measure volume/capacity (l/ml). Add and subtract lengths (m/cm/mm). Add and subtract mass (kg/g). Add and subtract volume/capacity (l/ml).
2		Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock/a.m./p.m., morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year.	Tell and write the time from an analogue clock; 12-hour clocks. Tell and write the time from an analogue clock; 24-hour clocks. Tell and write the time from an analogue clock, including using Roman numerals from I to XII Compare durations of events, [e.g. to calculate the time taken by particular events or tasks].
3		Recall and use multiplication and division facts for the 3, 4, and 8 multiplication tables	Add and subtract amounts of money to give change, using both pounds (£) and pence (p) in practical contexts.
4		Draw 2-D shapes. Identify horizontal, vertical lines and pairs of perpendicular and parallel lines.	Measure the perimeter of simple 2-D shapes. Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.
5		Recognise that angles are a property of shape or a description of a turn.	Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
6		Find 10 or 100 more or less than a given number. Add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds.	Interpret and present data using bar charts, pictograms and tables. Solve one-step and two step questions [e.g.: 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables
7		Assess and review	

Year 3: Spring 1

Week	Date	Fluency Objectives	Main Maths Objectives • Solve number and practical problems • Identify, represent and estimate numbers using different representations. • Estimate the answer to a calculation, and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.
1		Recognise the place value of each digit in a three-digit number (hundreds, tens and ones). Read and write numbers to 1000 in numerals and words.	Add numbers with up to three digits, using formal written methods of columnar addition.
2		Compare and order numbers up to 1000	Subtract numbers with up to three digits, using formal written methods of columnar subtraction.
3		Count from 0 in multiples of 4, 8, 50 and 100	Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
4		Recall and use multiplication and division facts for the 3, 4, and 8 multiplication tables.	Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
5		Find 10 or 100 more or less than a given number. Add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds.	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. Recognise and show, using diagrams, equivalent fractions with small denominators.
6		Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	Compare and order unit fractions and fractions with the same denominators. Add and subtract fractions with the same denominator within one whole [e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] Solve problems that involve fractions
7		Assess and review	

Year 3: Spring 2

Week	Date	Fluency Objectives	Main Maths Objectives
			• Solve number and practical problems • Identify, represent and estimate numbers using different representations. • Estimate the answer to a calculation, and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.
1		Compare lengths (m/cm/mm). Compare mass (kg/g). Compare volume/capacity (l/ml).	Measure lengths (m/cm/mm). Measure mass (kg/g). Measure volume/capacity (l/ml). Add and subtract lengths (m/cm/mm). Add and subtract mass (kg/g). Add and subtract volume/capacity (l/ml).
2		Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock/a.m./p.m., morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year.	Tell and write the time from an analogue clock; 12-hour clocks. Tell and write the time from an analogue clock; 24-hour clocks. Tell and write the time from an analogue clock, including using Roman numerals from I to XII Compare durations of events, [e.g. to calculate the time taken by particular events or tasks].
3		Recall and use multiplication and division facts for the 3, 4, and 8 multiplication tables	Add and subtract amounts of money to give change, using both pounds (£) and pence (p) in practical contexts.
4		Draw 2-D shapes. Identify horizontal, vertical lines and pairs of perpendicular and parallel lines.	Measure the perimeter of simple 2-D shapes. Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.
5		Recognise that angles are a property of shape or a description of a turn.	Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
6		Find 10 or 100 more or less than a given number. Add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds.	Interpret and present data using bar charts, pictograms and tables. Solve one-step and two step questions [e.g.: 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables
7		Assess and review	

Year 3: Summer 1

Week	Date	Fluency Objectives	Main Maths Objectives • Solve number and practical problems • Identify, represent and estimate numbers using different representations. • Estimate the answer to a calculation, and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.
1		Recognise the place value of each digit in a three-digit number (hundreds, tens and ones). Read and write numbers to 1000 in numerals and words.	Add numbers with up to three digits, using formal written methods of columnar addition.
2		Compare and order numbers up to 1000	Subtract numbers with up to three digits, using formal written methods of columnar subtraction.
3		Count from 0 in multiples of 4, 8, 50 and 100	Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
4		Recall and use multiplication and division facts for the 3, 4, and 8 multiplication tables.	Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
5		Find 10 or 100 more or less than a given number. Add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds.	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. Recognise and show, using diagrams, equivalent fractions with small denominators.
6		Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	Compare and order unit fractions and fractions with the same denominators. Add and subtract fractions with the same denominator within one whole [e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] Solve problems that involve fractions
7		Assess and review	

Year 3: Summer 2

Week	Date	Fluency Objectives	Main Maths Objectives • Solve number and practical problems • Identify, represent and estimate numbers using different representations. • Estimate the answer to a calculation, and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.
1		Compare lengths (m/cm/mm). Compare mass (kg/g). Compare volume/capacity (l/ml).	Measure lengths (m/cm/mm). Measure mass (kg/g). Measure volume/capacity (l/ml). Add and subtract lengths (m/cm/mm). Add and subtract mass (kg/g). Add and subtract volume/capacity (l/ml).
2		Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock/a.m./p.m., morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year.	Tell and write the time from an analogue clock; 12-hour clocks. Tell and write the time from an analogue clock; 24-hour clocks. Tell and write the time from an analogue clock, including using Roman numerals from I to XII Compare durations of events, [e.g. to calculate the time taken by particular events or tasks].
3		Recall and use multiplication and division facts for the 3, 4, and 8 multiplication tables	Add and subtract amounts of money to give change, using both pounds (£) and pence (p) in practical contexts.
4		Draw 2-D shapes. Identify horizontal, vertical lines and pairs of perpendicular and parallel lines.	Measure the perimeter of simple 2-D shapes. Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.
5		Recognise that angles are a property of shape or a description of a turn.	Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
6		Find 10 or 100 more or less than a given number. Add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds.	Interpret and present data using bar charts, pictograms and tables. Solve one-step and two step questions [e.g.: 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables
7		Assess and review	

Year 4: Autumn 1

Week	Date	Fluency Objectives	Main Maths Objectives
			• Recall multiplication and division facts for multiplication tables up to 12×12 • Identify, represent and estimate numbers using different representations. • Solve number and practical problems. • Estimate and use inverse operations to check answers to a calculation. • Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as *n* objects are connected to *m* objects.
1		Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). Order and compare numbers beyond 1000.	Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Solve addition two-step problems in contexts, deciding which operations and methods to use and why.
2		Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number.	Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why.
3		Recognise and use factor pairs and commutativity in mental calculations. Round any number to the nearest 10, 100 or 1000.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. Divide 2 digit and 3 digit numbers by a 1 digit number
4		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.	Recognise and show, using diagrams, families of equivalent fractions. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ Add and subtract fractions with the same denominator.
5		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 hundredths. Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Recognise and write decimal equivalents of any number of tenths or hundredths. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places.
6		Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. Count backwards through zero to include negative numbers.	Solve problems involving increasingly harder to calculate quantities and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Solve simple measure and money problems involving fractions and decimals to two decimal places.
7		Assess and review	

Year 4: Autumn 2

Week	Date	Fluency Objectives	Main Maths Objectives • Recall multiplication and division facts for multiplication tables up to 12×12
1		Convert between different units of measurement, e.g. kilometre to metre This unit includes money	Compare different measures. Estimate different measures. Calculate different measures.
2		Convert from hours to minutes; minutes to seconds; years to months; weeks to days. Convert between pounds and pence.	Read, write and convert time between analogue and digital 12-hour clocks. Read, write and convert time between analogue and digital 24-hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
3		Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Find the area of rectilinear shapes by counting squares. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
4		Identify acute and obtuse angles and compare and order angles up to two right angles by size.	Identify acute and obtuse angles and compare and order angles up to two right angles by size. Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes. Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.
5		Describe positions on a 2-D grid as coordinates in the first quadrant.	Plot specified points and draw sides to complete a given polygon. Describe movements between positions as translations of a given unit to the left/right and up/down.
6		Round any number to the nearest 10, 100 or 1000.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
7		Assess and review	

Year 4: Spring 1

Week	Date	Fluency Objectives	Main Maths Objectives
			• Recall multiplication and division facts for multiplication tables up to 12×12 • Identify, represent and estimate numbers using different representations. • Solve number and practical problems. • Estimate and use inverse operations to check answers to a calculation. • Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as *n* objects are connected to *m* objects.
1		Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). Order and compare numbers beyond 1000.	Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Solve addition two-step problems in contexts, deciding which operations and methods to use and why.
2		Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number.	Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why.
3		Recognise and use factor pairs and commutativity in mental calculations. Round any number to the nearest 10, 100 or 1000.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. Divide 2 digit and 3 digit numbers by a 1 digit number
4		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.	Recognise and show, using diagrams, families of equivalent fractions. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ Add and subtract fractions with the same denominator.
5		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 hundredths. Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Recognise and write decimal equivalents of any number of tenths or hundredths. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places.
6		Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. Count backwards through zero to include negative numbers.	Solve problems involving increasingly harder to calculate quantities and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Solve simple measure and money problems involving fractions and decimals to two decimal places.
7		Assess and review	

Year 4: Spring 2

Week	Date	Fluency Objectives	Main Maths Objectives • Recall multiplication and division facts for multiplication tables up to 12×12
1		Convert between different units of measurement, e.g. kilometre to metre This unit includes money	Compare different measures. Estimate different measures. Calculate different measures.
2		Convert from hours to minutes; minutes to seconds; years to months; weeks to days. Convert between pounds and pence.	Read, write and convert time between analogue and digital 12-hour clocks. Read, write and convert time between analogue and digital 24-hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
3		Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Find the area of rectilinear shapes by counting squares. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
4		Identify acute and obtuse angles and compare and order angles up to two right angles by size.	Identify acute and obtuse angles and compare and order angles up to two right angles by size. Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes. Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.
5		Describe positions on a 2-D grid as coordinates in the first quadrant.	Plot specified points and draw sides to complete a given polygon. Describe movements between positions as translations of a given unit to the left/right and up/down.
6		Round any number to the nearest 10, 100 or 1000.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
7		Assess and review	

Year 4: Summer 1

Week	Date	Fluency Objectives	Main Maths Objectives
			• Recall multiplication and division facts for multiplication tables up to 12×12 • Identify, represent and estimate numbers using different representations. • Solve number and practical problems. • Estimate and use inverse operations to check answers to a calculation. • Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
1		Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). Order and compare numbers beyond 1000.	Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Solve addition two-step problems in contexts, deciding which operations and methods to use and why.
2		Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number.	Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why.
3		Recognise and use factor pairs and commutativity in mental calculations. Round any number to the nearest 10, 100 or 1000.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. Divide 2 digit and 3 digit numbers by a 1 digit number
4		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.	Recognise and show, using diagrams, families of equivalent fractions. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ Add and subtract fractions with the same denominator.
5		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 hundredths. Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Recognise and write decimal equivalents of any number of tenths or hundredths. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places.
6		Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. Count backwards through zero to include negative numbers.	Solve problems involving increasingly harder to calculate quantities and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Solve simple measure and money problems involving fractions and decimals to two decimal places.
7		Assess and review	

Year 4: Summer 2

Week	Date	Fluency Objectives	Main Maths Objectives • Recall multiplication and division facts for multiplication tables up to 12×12
1		Convert between different units of measurement, e.g. kilometre to metre This unit includes money	Compare different measures. Estimate different measures. Calculate different measures.
2		Convert from hours to minutes; minutes to seconds; years to months; weeks to days. Convert between pounds and pence.	Read, write and convert time between analogue and digital 12-hour clocks. Read, write and convert time between analogue and digital 24-hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
3		Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Find the area of rectilinear shapes by counting squares. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
4		Identify acute and obtuse angles and compare and order angles up to two right angles by size.	Identify acute and obtuse angles and compare and order angles up to two right angles by size. Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes. Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.
5		Describe positions on a 2-D grid as coordinates in the first quadrant.	Plot specified points and draw sides to complete a given polygon. Describe movements between positions as translations of a given unit to the left/right and up/down.
6		Round any number to the nearest 10, 100 or 1000.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
7		Assess and review	

Year 5: Autumn 1

Week	Date	Daily Fluency Objectives • Multiply and divide numbers mentally drawing upon known facts. • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Main Maths Objectives • Solve problems involving addition, subtraction, multiplication and division. • Solve problems involving numbers up to three decimal places. • Solve problems which require knowing percentage and decimal equivalents of fractions with a denominator of a multiple of 10 or 25
1		Read, write, order and compare numbers to at least 1 000 000 Determine the value of each digit in numbers up to 1 000 000 Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	Add whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction). Solve addition multi-step problems in contexts, deciding which operations and methods to use and why.
2		Add and subtract numbers mentally with increasingly large numbers. Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.	Subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction). Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
3		Establish whether a number up to 100 is prime and recall prime numbers up to 19 Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed(^{3}).	Multiply numbers up to four digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. Divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
4		Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Multiply numbers up to four digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. Divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
5		Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. Compare and order fractions whose denominators are all multiples of the same number. Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements > 1 as a mixed number.	Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
6		Read and write decimal numbers as fractions Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'; write percentages as a fraction with denominator of a hundred, and as a decimal.	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places.
7		Assess and review	

Year 5: Autumn 2

Week	Date	Daily Fluency Objectives	Main Maths Objectives
1		Convert between different units of metric measure [e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre].	Use all four operations to solve problems involving measure (length, mass and volume) using decimal notation, including scaling. Estimate volume [e.g. using 1 cm³ blocks to build cuboids (including cubes)] and capacity [e.g. using water].
2		Add and subtract numbers mentally with increasingly large numbers. Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.	Solve problems involving converting between units of time and money.
3		Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. 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.
4		Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.	Identify: • angles at a point and one whole turn (360°) • angles at a point on a straight line and ½ turn (180°) • other multiples of 90° Draw given angles and measure them in degrees.
5		Identify 3-D shapes including cubes and other cuboids, from 2-D representations.	Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. 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.
6		Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed(^{3}). Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.	Complete, read and interpret information in tables, including timetables. Solve comparison, sum and difference problems using information presented in a line graph.
7		Assess and review	

Year 5: Spring 1

Week	Date	Daily Fluency Objectives • Multiply and divide numbers mentally drawing upon known facts. • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Main Maths Objectives • Solve problems involving addition, subtraction, multiplication and division. • Solve problems involving numbers up to three decimal places. • Solve problems which require knowing percentage and decimal equivalents of fractions with a denominator of a multiple of 10 or 25
1		Read, write, order and compare numbers to at least 1 000 000 Determine the value of each digit in numbers up to 1 000 000 Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	Add whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction). Solve addition multi-step problems in contexts, deciding which operations and methods to use and why.
2		Add and subtract numbers mentally with increasingly large numbers. Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.	Subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction). Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
3		Establish whether a number up to 100 is prime and recall prime numbers up to 19 Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. Recognise and use square numbers and cube numbers, and the notation for squared(^{2}) and cubed(^{3}).	Multiply numbers up to four digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. Divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
4		Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Multiply numbers up to four digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. Divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
5		Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. Compare and order fractions whose denominators are all multiples of the same number. Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements > 1 as a mixed number.	Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
6		Read and write decimal numbers as fractions Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'; write percentages as a fraction with denominator of a hundred, and as a decimal.	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places.
7		Assess and review	

Year 5: Spring 2

Week	Date	Fluency Objectives	Main Maths Objectives • Recall multiplication and division facts for multiplication tables up to 12×12
1		Convert between different units of metric measure [e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre].	Use all four operations to solve problems involving measure (length, mass and volume) using decimal notation, including scaling. Estimate volume [e.g. using 1 cm³ blocks to build cuboids (including cubes)] and capacity [e.g. using water].
2		Add and subtract numbers mentally with increasingly large numbers. Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.	Solve problems involving converting between units of time and money.
3		Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. 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.
4		Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.	Identify: • angles at a point and one whole turn (360°) • angles at a point on a straight line and ½ turn (180°) • other multiples of 90° Draw given angles and measure them in degrees.
5		Identify 3-D shapes including cubes and other cuboids, from 2-D representations.	Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. 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.
6		Recognise and use square numbers and cube numbers, and the notation for squared(²) and cubed(³). Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.	Complete, read and interpret information in tables, including timetables. Solve comparison, sum and difference problems using information presented in a line graph.
7		Assess and review	

Year 5: Summer 1

Week	Date	Daily Fluency Objectives • Multiply and divide numbers mentally drawing upon known facts. • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Main Maths Objectives • Solve problems involving addition, subtraction, multiplication and division. • Solve problems involving numbers up to three decimal places. • Solve problems which require knowing percentage and decimal equivalents of fractions with a denominator of a multiple of 10 or 25
1		Read, write, order and compare numbers to at least 1 000 000 Determine the value of each digit in numbers up to 1 000 000 Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	Add whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction). Solve addition multi-step problems in contexts, deciding which operations and methods to use and why.
2		Add and subtract numbers mentally with increasingly large numbers. Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.	Subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction). Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
3		Establish whether a number up to 100 is prime and recall prime numbers up to 19 Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed(^{3}).	Multiply numbers up to four digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
4		Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
5		Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. Compare and order fractions whose denominators are all multiples of the same number. Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements > 1 as a mixed number.	Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
6		Read and write decimal numbers as fractions Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'; write percentages as a fraction with denominator of a hundred, and as a decimal.	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places.
7		Assess and review	

Year 5: Summer 2

Week	Date	Mental Maths Objectives	Main Maths Objectives • Recall multiplication and division facts for multiplication tables up to 12×12
1		Convert between different units of metric measure [e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre].	Use all four operations to solve problems involving measure (length, mass and volume) using decimal notation, including scaling. Estimate volume [e.g. using 1 cm³ blocks to build cuboids (including cubes)] and capacity [e.g. using water].
2		Add and subtract numbers mentally with increasingly large numbers. Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.	Solve problems involving converting between units of time and money.
3		Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. 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.
4		Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.	Identify: • angles at a point and one whole turn (360°) • angles at a point on a straight line and ½ turn (180°) • other multiples of 90° Draw given angles and measure them in degrees.
5		Identify 3-D shapes including cubes and other cuboids, from 2-D representations.	Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. 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.
6		Recognise and use square numbers and cube numbers, and the notation for squared(²) and cubed(³). Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.	Complete, read and interpret information in tables, including timetables. Solve comparison, sum and difference problems using information presented in a line graph.
7		Assess and review	

Year 6: Autumn 1

Week	Date	Fluency Objectives • Times tables up 12 x 12	Main Maths Objectives • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. • Solve problems involving addition, subtraction, multiplication and division. • Round any number to a required degree of accuracy in problems.
1		Determine the value of each digit in numbers up to 10 000 000 Read, write, order and compare numbers up to 10 000 000	Formal addition using the column method. Solve addition multi-step problems in contexts, deciding which operations and methods to use and why.
2		Identify common factors, multiples and prime numbers. Use negative numbers in context, and calculate intervals across zero.	Formal subtraction using the column method. Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
3		Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to two decimal places.	Multiply multi-digit numbers up to 4 digits by a two-digit number using the formal method of long multiplication. Multiply one-digit numbers with up to two decimal places by whole numbers.
4		Round any number to a required degree of accuracy. Use negative numbers in context, and calculate intervals across zero.	Divide numbers up to 4 digits by a one-digit whole number using the formal written method of short division, and interpret remainders according to context. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. Use written division methods in cases where the answer has up to two-decimal places.
5		Identify common factors, multiples and prime numbers.	Use common factors to simplify fractions; use common multiples to express fractions in the same denominator. Compare and order fractions, including >1 Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction.
6		Recall and use the equivalences between simple fractions, decimals and percentages, including in different contexts.(also in word problems)	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply and divide simple pairs of proper fractions, writing the answer in its simplest form
7		Assess and review	

Year 6: Autumn 2

Week	Date	Fluency Objectives • Times tables up 12 x 12	Main Maths Objectives • Solve problems involving calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
1		Solve simple ratio problems.	Solve problems involving the relative sizes of two quantities, where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages and the use of percentages for comparison. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. Calculate and interpret the mean as an average.
2		Convert between miles and kilometres. Convert between seconds, minutes, hours, days, weeks, months and years.	Use, read, write and convert between standard units, length, mass and time, using decimal notation up to 3 decimal places.
3		Compare and classify geometric shapes based on their properties and sizes. Describe 3-D shapes.	Draw 2-D shapes using given dimensions and angles. Recognise and build 3-D shapes, including making nets. Calculate the area of compound shapes, parallelograms and triangles. Recognise the use of formulae for area.
4		Solve simple angle problems. Find unknown angles in any triangles, quadrilaterals and regular polygons.	Recognise that shapes with the same area can have different perimeters and vice versa. Calculate, estimate and compare volume. Recognise the use of formulae for volume. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find the missing angles.
5		Name and plot points on a co-ordinates grid. Name 2D shapes based on their properties.	Illustrate and name parts of the circle, including radius, diameter and circumference and know that the diameter is twice the radius. Describe positions on the full coordinate grid (all four quadrants). Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. Solve problems involving similar shapes where the scale factor is known or can be found.
6		Use their knowledge of the order of operations to carry out calculations involving the four operations.	Interpret and construct tables, bar graphs, pie charts and line graphs and use these to solve problems.
7		Assess and review	

Year 6: Spring 1

Week	Date	Fluency Objectives • Times tables up 12 x 12	Main Maths Objectives • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. • Solve problems involving addition, subtraction, multiplication and division. • Round any number to a required degree of accuracy in problems.
1		Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to two decimal places.	Addition and subtraction.
2		Identify common factors, multiples and prime numbers. Use negative numbers in context, and calculate intervals across zero.	Multiplication and division.
3		Round any number to a required degree of accuracy. Use negative numbers in context, and calculate intervals across zero.	BODMAS – Use knowledge of the order of operations to carry out calculations involving the four operations.
4		Identify common factors, multiples and prime numbers.	Use common factors to simplify fractions; use common multiples to express fractions in the same denominator. Compare and order fractions, including >1 Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction.
5		Recall and use the equivalences between simple fractions, decimals and percentages, including in different contexts.(also in word problems)	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form
6		Generate and describe number sequences.	Express missing number problems algebraically. Use simple formulae. Find pairs of numbers that satisfy an equation with two unknowns. Enumerate possibilities of combination of two variables.
7		Assess and review	

Year 6: Spring 2

Week	Date	Fluency Objectives • Times tables up 12 x 12	Main Maths Objectives
1		Solve simple ratio problems.	Solve problems involving the relative sizes of two quantities, where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages and the use of percentages for comparison. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. Calculate and interpret the mean as an average.
2		Convert between miles and kilometres. Convert between seconds, minutes, hours, days, weeks, months and years.	Use, read, write and convert between standard units, length, mass and time, using decimal notation up to 3 decimal places.
3		Compare and classify geometric shapes based on their properties and sizes. Describe 3-D shapes.	Draw 2-D shapes using given dimensions and angles. Recognise and build 3-D shapes, including making nets. Calculate the area of compound shapes, parallelograms and triangles. Recognise the use of formulae for area.
4		Solve simple angle problems. Find unknown angles in any triangles, quadrilaterals and regular polygons.	Recognise that shapes with the same area can have different perimeters and vice versa. Calculate, estimate and compare volume. Recognise the use of formulae for volume. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find the missing angles.
5		Name and plot points on a co-ordinates grid. Name 2D shapes based on their properties.	Illustrate and name parts of the circle, including radius, diameter and circumference and know that the diameter is twice the radius. Describe positions on the full coordinate grid (all four quadrants). Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. Solve problems involving similar shapes where the scale factor is known or can be found.
6		Use their knowledge of the order of operations to carry out calculations involving the four operations.	Interpret and construct tables, bar graphs, pie charts and line graphs and use these to solve problems.
7		Assess and review	

Year 6: Summer 1

Week	Date	Fluency Objectives	Main Maths Objectives
1		Revision	
2		Revision	
3		SATS WEEK	
4		Themed project – White Rose, consolidation and problem solving.	
5		Themed project – White Rose, consolidation and problem solving.	
6		Themed project – White Rose, consolidation and problem solving.	

Year 6: Summer 2

Week	Date	Fluency Objectives	Main Maths Objectives
1		Themed project – White Rose, consolidation and problem solving.	
2		Themed project – White Rose, consolidation and problem solving.	
3		Themed project – White Rose, consolidation and problem solving.	
4		Themed project – White Rose, consolidation and problem solving.	
5		Themed project – White Rose, consolidation and problem solving.	
6		Themed project – White Rose, consolidation and problem solving.	