

Number and place value	Objective	Autumn	Spring	Summer
	Read numbers to 10,000,000: Write in figures - Six million, two hundred forty-five thousand, three hundred seventy-eight.	X		X
	Identify the value of each digit in numbers up to 10,000,000: What is the value of the 5 in 6,245,378.	X		X
	Write numbers to 10,000,000: Write in words 4,506,120.	X		X
	Compare numbers up to 10,000,000: 6,245,378 and 6,245,379 → 6,245,378 < 6,245,379.	X		X
	Order numbers up to 10,000,000: 6,245,378; 6,245,379; 6,245,300.	X		X
	Round numbers to the nearest 10: 573,295 = 573,300.	X		
	Round numbers to the nearest 100: 482,204 = 482,200.	X		
	Round numbers to the nearest 1000: 472,295 = 472,000	X		
	Powers of 10: multiplying/dividing by 10/100/1000	X		X
	Round numbers to the nearest 10,000: 285,952 = 290,000.	X		X
	Round numbers to the nearest 100,000: 3,294,294 = 3,300,000.		X	X
	Round numbers to the nearest 1,000,000: 34,249,395 = 34,000,000.		X	X
	Round numbers to the nearest 10,000,000: 34,342,225 = 30,000,000.		X	X
	Read negative numbers on a number line.	X		
	Count forwards and backwards on a number line.	X		
	Compare positive and negative numbers: 4 > -2	X		X
	Order a set of negative numbers: -7, -3, -11, 0, -17.	X		X
	Find the difference between negative numbers: difference between -7 and -3.		X	X
	Find the different between negative and positive numbers: -3 and 7.		X	X
	Calculate intervals across 0: -5 to +9.	X	X	
	Use negative numbers in context: The temperature in Scotland was – 3°C in the morning. By the afternoon, it had dropped by 5°C. What was the temperature in the afternoon?		X	X
	Read Roman numerals up to 1,000.	X		X
	Write Roman numerals up to 1,000.	X		X
	Convert Roman numerals	X	X	

	Objective	Autumn	Spring	Summer
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Addition and subtraction	Column addition with no exchanging: $1323 + 2231 = 3554$	X		
	Column addition with exchanging: $4738 + 3697 = 8435$	X		X
	Add multi-digit numbers up to 7 digits: $3,245,678 + 1,876,543 = 5,122,221$	X		X
	Add decimal numbers up to three decimal places: $12.345 + 4.678 = 17.023$			X
	Add mixed whole and decimal numbers: $123 + 45.67 = 168.67$		X	X
	Estimate sums by rounding: $478 + 367: 500 + 400 = 900$	X		X
	Check addition using inverse operations: $345 + 567 = 912 \rightarrow 912 - 567 = 345$	X		X
	Column subtraction with no exchanging: $4352 - 1213 = 3049$	X		
	Column subtraction with exchanging: $702 - 389 = 313$	X		X
	Subtract multi-digit numbers up to 7 digits: $6,245,678 - 3,123,456 = 3,122,222$	X		X
	Subtract decimal numbers up to three decimal places: $12.345 - 4.678 = 7.667$		X	X
	Subtract mixed whole and decimal numbers: $123 - 45.67 = 77.33$		X	X
	Check subtraction using inverse operations: $745 - 378 = 367 \rightarrow 367 + 378 = 745$	X		X
	Estimate sums by rounding: $707 - 312 = 700 - 300 = 400$	X		X
	Multi-step word problems (addition and subtraction) – deciding which operation to use and when.	X	X	

Multiplication and division	Objective	Autumn	Spring	Summer
	Multiply multi-grid numbers using the grid method: $356 \times 28 =$	X		
	Multiply 4-digit $\times$ 1-digit numbers: $2345 \times 6 = 14,070$	X		
	Multiply 2-digit numbers $\times$ 2 digit numbers: $64 \times 78 =$	X	X	
	Multiply 3-digit $\times$ 2-digit numbers: $123 \times 14 = 1,722$	X	X	
	Multiply 4-digit $\times$ 2-digit numbers: $1234 \times 23 = 28,382$		X	X
	Multiply decimal numbers by whole numbers: $12.3 \times 4 = 49.2$		X	X
	Use mental multiplication strategies: $25 \times 16 = 25 \times 10 + 25 \times 6 = 250 + 150 = 400$	X		
	Identify common factors: Common factors of 12 and 18 $\rightarrow$ 1, 2, 3, 6	X		

	Find the LCM: LCM OF 5 and 10 is: 10	X		X
	Find the HCF: HCF of 16 and 24 is: 8.	X		X
	Identify common multiples: Common multiples of 3 and 4 → 12, 24, 36	X		X
	Identify prime numbers – know if a number is prime and recall the first 19 prime numbers. 29 is prime (only divisible by 1 and 29)	X	X	
	Find prime factors.	X		X
	Squared numbers	X	X	
	Cubed numbers	X	X	
	Divide 4-digit by 1-digit with no remainders: $4,632 \div 4 = 1,158$	X		X
	Divide 4-digit by 1-digit with remainders: $4,635 \div 4 = 1,158$ remainder 3	X		X
	Divide 2-digit by 2-digit with no remainders	X		X
	Divide 2-digit by 2-digit with remainders	X	X	
	Divide 3-digit numbers by 2-digit numbers no remainders	X		X
	Divide 3-digit numbers by 2-digit numbers with remainders	X	X	
	Divide 4-digit numbers by 2-digit numbers no remainders	X		X
	Divide 4-digit numbers by 2-digit numbers with remainders	X	X	
	Multiply numbers (whole and decimals) by 10: $6.4 \times 10 = 64.$	X		X
	Multiply numbers (whole and decimals) by 100: $6.4 \times 100 = 640.$	X		X
	Multiply numbers (whole and decimals) by 1000: $6.4 \times 1000 = 6400.$		X	X
	Divide numbers (whole and decimals) by 10: $64 \div 10 = 6.4$	X		X
	Divide numbers (whole and decimals) by 100: $64 \div 100 = 0.64$	X		X
	Divide numbers (whole and decimals) by 1000: $64 \div 1000 = 0.064$		X	X
	Use mental division strategies.	X		
	Interpret remainders in context: 53 apples shared between 8 children → 6 each, 5 left over - should be rounded up, down, or left as leftover?	X		X
	Apply BIDMAS: $3 + 6 \times 2 = 3 + 12 = 15$		X	

Fractions, decimals and percentages	Objective	Autumn	Spring	Summer
	Convert between fractions and decimals.	X		X

	Convert between decimals and fractions.	X		X
	Round decimal numbers to the nearest whole number: $87.3 = 87$	X		X
	Round to a given decimal place.		X	X
	Order numbers with up to 3 decimal places.		X	X
	Compare numbers up to 3 decimal places.		X	X
	Use common factors to simplify fractions: Common factor = 6 → $12 \div 6 = 2$ $18 \div 6 = 3$ → $2/3$		X	X
	Use common multiples to express fractions in the same denomination: $1/4$ and $1/6$ have the common multiples of 4 and 6 → $1/4 = 3/12$ and $1/6 = 2/12$		X	X
	Compare fractions, including fractions > 1: $5/4 = 1.25$ and $3/2 = 1.5$ so $5/4 < 3/2$		X	X
	Order fractions, including fractions > 1: $3/4, 5/4, 2/3$		X	X
	Convert fractions to percentages.		X	X
	Order percentages		X	X
	Add fractions with the same denominators: $3/8 + 2/8 =$	X		
	Subtract fractions with the same denominators: $7/10 + 4/10 =$	X		
	Add fractions with different denominators: $1/6 + 1/4 =$	X	X	
	Subtract fractions with different denominators: $5/6 - 1/3 =$	X	X	
	Add mixed number fractions: $2 \frac{1}{4} + 1 \frac{2}{4} =$		X	X
	Subtract mixed number fractions: $3 \frac{3}{5} - 1 \frac{1}{5} =$		X	X
	Multiply proper fractions: $2/3 \times 3/5 =$	X	X	
	Divide proper fractions by whole numbers: $3/4 \div 2 =$		X	X
	Convert improper fractions to mixed number fractions: $11/4 = 2 \frac{3}{4}$	X	X	
	Convert mixed number fractions to improper fractions: $2 \frac{3}{5} = 13/5$	X	X	
	Find fractions of an amount: Find $2/5$ of $10 = 4$.		X	X
	Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction: $1/8 = 0.125$		X	X
	Identify the value of each digit in numbers given to three decimal places: In the number 4.327, what is the value of the digit 2?	X		X
	Find 50% of a given number.	X	X	
	Find 10% of a given number.	X	X	
	Find 1% of a given number.	X	X	
	Find 20% of a given number.	X	X	

	• Find 30% of a given number.		X	X
	• Find 40% of a given number.		X	X
	• Find 25% of a given number.		X	X
	• Find 75% of a given number.		X	X

Ratio and Proportion (including percentages)	Objective	Autumn	Spring	Summer
	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts: A recipe uses 3 cups of flour to make 6 muffins. How many muffins can be made with 9 cups of flour?		X	X
	Solve problems involving similar shapes where the scale factor is known or can be found: A rectangle is 4 cm wide. A similar rectangle is enlarged by a scale factor of 3. What is the width of the new rectangle?		X	X
	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples: Three children share £24 in the ratio 1:2:3. How much does each child get?		X	X