College Road Primary School and White Rose Maths Progression in Fractions, decimals and percentages

College Road
Primary School

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions – Recognise and Write	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	Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.	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 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	Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}$ = $1\frac{1}{5}$]	
Compare		Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	Recognise and show, using diagrams, equivalent fractions with small denominators.	Recognise and show, using diagrams, families of common equivalent fractions.	Compare and order fractions whose denominators are all multiples of the same number.	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

			Compare and order unit fractions, and fractions with the same denominators.			Compare and order fractions, including fractions > 1
Calculations		Write simple fractions for example, $\frac{1}{2}$ of 6 = 3	Add and subtract fractions with the same denominator within one whole [for example $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$	Add and subtract fractions with the same denominator	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	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 [for example $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ Divide proper fractions by whole numbers [for example $\frac{1}{3} \div 2 = \frac{1}{6}$
Autumn					Block 4 Week 9 – 12	Block 3 Week 8 – 9 Block 4 Week 10 - 11

Spring			Block 3 Week 7 – 9	Block 3 Week 6 – 9	B Block 2 Week 4 - 5	
Summer		Block 1 Week 1 - 3	Block 1 Week 1 – 3			
Small steps Autumn					1. Find fractions equivalent to a unit fraction 2. Find fractions equivalent to a non-unit fraction 3. Recognise equivalent fractions 4. Convert improper fractions to mixed numbers 5. Convert mixed numbers to improper fractions 6. Compare fractions less than 1 7. Order fractions less than 1 8. Compare and order fractions greater than 1	1. Equivalent fraction and simplifying 2. Equivalent fractions on a number line 3. Compare and order (denominator) 4. Compare and order numerator 5. Add and subtract simple fractions 6. Add and subtract any two fractions 7. Add mixed numbers 8. Subtract mixed numbers 9. Multiply step problems Fractions B 1. Multiply fractions by integers 2. Multiply fractions by fractions

					9. Add and subtract fractions with the same denominator 10. Add fractions within 1 11. Add fractions with a total greater than 1 12. Add to a mixed number 13. Add two mixed numbers 14. Subtract fractions 15. Subtract from a mixed number 16. Subtract from a mixed number breaking the whole 17. Subtract 2 mixed numbers	3. Divide a fraction by an integer 4. Divide any fraction by an integer 5. Mixed questions with fractions 6. Fraction of an amount 7. Fraction of an amount – find the whole
Small Steps Spring			1. Understand the denominators of unit fractions. 2. Compare and order unit fractions. 3. Understand the numerators 4. Understand the whole 5. Compare and order non-unit fractions 6. Fractions and scales 7. Fractions on a number line	1. Understand the whole 2. Count beyond 1 3. Partition a mixed number 4. Number lines with mixed number 5. Compare and order mixed numbers 6. Understand improper fractions 7. Convert mixed numbers	1. Multiply a unit fraction by an integer 2. Multiply a non-unit fraction by an integer 3. Multiply a mixed number by an integer 4. Calculate a fraction of a quantity 5. Fraction of an amount 6. Find the whole 7. Use fractions as operators	1. Decimal and fraction equivalents 2. Fractions as divisions 3. Understand percentages 4. Understand percentages as fractions 5. Equivalent fractions, decimals and percentages 6. Order fractions, decimals and percentages

			8. Count in fractions on a number line 9. Equivalent fractions on a number line 10. Equivalent fractions as bar models	8. Convert improper fractions to mixed numbers 9. Equivalent fractions on a number line 10. Equivalent fraction Families 11. Add two or more fractions 12. Add fractions and mixed numbers 13. Subtract two fractions 14. Subtract from whole numbers 15. Subtract from mixed numbers		7. Percentage of an amount one step 8. Percentage of an amount – multi step 9. Percentages missing values
Small Steps Summer		1. Introduction to part and whole. 2. Equal and unequal parts 3. Recognise a half. 4. Find a half. 5. Recognise a quarter. 6. Find a quarter. 7. Recognise a third. 8. Find a third. 9. Find the whole. 10. Unit fractions. 11. Non-unit fractions. 12. Recognise the equivalence of a half and two quarters.	1. Add fractions 2. Subtract fractions 3. Partition the whole 4. Unit fractions of a set of objects 5. Non-unit fractions 6. Reasoning with fractions of an amount			

		13. Recognise three quarters. 14. Find three quarters. 15. Count in fractions up to a whole.				