

Primary Progression – Fractions, Decimals, Percentages



	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 Summer 2	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 Spring 4	- 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 Spring 5	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Spring 3	- 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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] Spring 2	
Fractions: Compare		Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ Spring 4	- recognise and show, using diagrams, equivalent fractions with small denominators - compare and order unit fractions, and fractions with the same denominators Summer 1	recognise and show, using diagrams, families of common equivalent fractions Spring 3	compare and order fractions whose denominators are all multiples of the same number Spring 2	- use common factors to simplify fractions; use common multiples to express fractions in the same denomination - compare and order fractions, including fractions > 1 Autumn 3

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Fractions: 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, $\frac{1}{3} \div 2 = \frac{1}{6}$]
		Spring 4	Summer 1	Spring 3	Spring 3	Autumn 3
Fractions: Solve Problems			solve problems that involve all of the above	solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number		
			Spring 5 Summer 1	Spring 3		

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Decimals: Recognise and Write				- recognise and write decimal equivalents of any number of tenths or hundredths - recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ Spring 4 Summer 1	- read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] - recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents Spring 3	identify the value of each digit in numbers given to three decimal places Spring 1
Decimals: Compare				- 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 Summer 1	- 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 Spring 3	

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Decimals: Calculations & Problems				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 Spring 4	solve problems involving number up to three decimal places Summer 1	- multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places - multiply one-digit numbers with up to two decimal places by whole numbers - use written division methods in cases where the answer has up to two decimal places - solve problems which require answers to be rounded to specified degrees of accuracy Spring 1

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Fractions, Decimals and Percentages				solve simple measure and money problems involving fractions and decimals to two decimal places Spring 3 Spring 4 Summer 1	- recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal - solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 Spring 3	- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] - recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Spring 1 Spring 2