Year 6 Fractions, Decimals and Percentages Learning Journey

Ready to Progress

Non-statutory guidance for key skills and knowledge needed Resources, ideas and assessment questions available in the Maths Guidance NCETM

Year 5 Prior Learning	Year 6	NCETM
Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths and understand they have the same position in the linear number system	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.	
	✓ Use common factors to simplify fractions	
Compare and order fractions whose denominators are multiples of the same number.	✓ Use common multiples to find equivalent fractions Compare and order fractions, including fractions > 1	
✓ Compare fractions whose denominators are multiples of the same number	✓ Compare and order fractions	
 ✓ Order fractions whose denominators are multiples of the same number 	✓ Compare and order fractions, including fractions > 1	
Read and write decimal numbers as fractions	Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]	
✓ Write a number (less than 1) with 1 d.p. as a fraction	✓ Understand a fraction is associated with division	
✓ Write a number (less than 1) with 2 d.p. as a fraction	✓ Work out the decimal equivalents of fifths, eighths and tenths	
Recognise the % symbol and understand that per cent relates to a number of part per hundred and write % as fraction with denominator 100 and as a decimal	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	
✓ % = parts per hundred	✓ Know simple fractions, decimals and percentages equivalences (e.g. 10%, 20%, 25%, 50%, 75%, 100%)	
✓ Write % as a fraction out of 100✓ Write % as a decimal	✓ Find equivalencies between fractions, decimals and percentage	

Year 5 Prior Learning	Year 6	NCETM
Add and subtract fractions with	Add and subtract fractions with different	
the same denominator and	denominators and mixed numbers, using the	
denominators that are multiples	concept of equivalent fractions mixed number [for	
of the same number	example, 2/5 + 4/5 = 6/5 = 1 1/5]	
✓ Add fractions when one denominator is a multiple of the other including mixed numbers as part of the question and/or answer.	✓ Add fractions with different denominators	
✓ Subtract fractions when one denominator is a multiple of the other including mixed numbers as part of the question and/or answer	✓ Add a mixed number and a fraction, including with different denominators	
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, 2/5 + 4/5 = 6/5 = 1 1/5]	✓ Add mixed numbers, including with different denominators	
✓ Convert improper fractions into mixed numbers	✓ Subtract fractions with different denominators	
✓ Convert mixed numbers into improper fractions	✓ Subtract a mixed number and a fraction, including with different denominators	
	✓ Subtract mixed numbers, including with different denominators	
Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1/4 \times 1/2 = 1/8$]	
✓ Multiply a proper fraction by a whole number	✓ Multiply a proper fraction by a proper fraction	
 Multiply a mixed number by a whole number 	✓ Multiply a proper fraction by a mixed number	
	Divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$]	
	Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison	
	✓ Calculate percentages of a quantity✓ Solve problems involving the use of percentages	
	to make comparisons	