5.2	Fluency Focus	NC Objectives	Remember (Prior knowledge)	Know (New knowledge)	Mathematics Guidance June 2020 Ready-to-progress criteria
1		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		LO: Know how to find equivalent fractions (x 2 lessons – with and then without a fraction wall) LO: Know how to convert improper fractions to mixed numbers (x 2 lessons – using a whole & parts model, followed by abstract method) LO: Know how to convert mixed numbers to improper fractions (x 2 lessons – using a whole & parts model, followed by the abstract – take this learning into Week 2)	
2		compare and order fractions whose denominators are all multiples of the same number		LO: Know how to work within fractional sequences LO: Know how to compare fractions where the denominators are similar (one is a multiple of the other) (fractions less than 1) LO: Know how to order fractions where the denominators are similar (fractions less than 1) LO: Know how to compare fractions where the denominators are similar (mixed and improper, more than 1)	

3		'Add and subtract fractions with the same denominator and denominators that are multiples of the same number.' compare and order fractions whose denominators are all multiples of the same number	Add and subtract fractions with the same denominator	LO: Know how to order fractions where the denominators are similar (mixed and improper, more than 1) LO: Know how to add and subtract fractions with similar denominators (x 2 lessons – answers are less than 1, then more than 1) LO: Know how to add 3 or more fractions with similar denominators LO: Know how to add and subtract a fraction to or from a mixed number with similar denominators (wholes, then parts, no breaking the whole)	
4		'Add and subtract fractions with the same denominator and denominators that are multiples of the same number.'	Add and subtract fractions with the same denominator	LO: Know how to add and subtract a fraction to or from a mixed number with similar denominators (wholes, then parts, breaking the whole) LO: Know how to add or subtract two mixed numbers with similar denominators	
5	Column multiplication	'Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.'		Multiply unit and non-unit fractions by integers Multiply mixed numbers by integers Find a fraction of an amount Use fractions as operators	Find non-unit fractions of quantities.

6	Adding and subtracting fractions	'Read and write decimal numbers as fractions.'	Recognise and write decimal equivalents of any number of tenths or hundredths Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Compare numbers with the same number of decimal places up to two decimal places	Place value up to 2dp Write decimals as fractions Understand a thousandth and write unit and non-unit fractions, with denominator of 1000, as a decimal, and explore the link between tenths, hundredths and thousandths. read, write, order and compare numbers with up to three decimal places (x 2 - 3 lessons)	Convert between units of measure, including using common decimals and fractions.
7	Rounding to the nearest 10, 100 and 1000.	'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. Solve problems involving number up to three decimal places.'	round decimals with one decimal place to the nearest whole number recognise and write decimal equivalents to 1 / 4 ; 1 / 2 ; 3 / 4	Round decimals Compare decimals Order decimals Understand percentages as parts per 100	Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.
8	Finding equivalent fractions.	'Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.'	solve simple measure and money problems involving fractions and decimals to two decimal places.	Write fractions, with either a denominator of 100, a factor of 100 or a multiple of 100, as decimals and percentages Recognise simple equivalent fractions and represent as decimals and percentages	Recall decimal fraction equivalents for 1/4 , 1/2 , 1/5 and 1/10 and for multiples of these proper fractions.

9		read and write decimal numbers as fractions 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 solve problems involving number up to three decimal places	Nothing on NCETM	LO: Recap knowledge of place value up to 2dp LO: Know how to add decimals within 1 (concrete / pictorial) LO: Know how to subtract decimals within 1 (concrete / pictorial) LO: Know complements to 1 (concrete / pictorial) LO: Know how to add numbers less than 1 when the sum bridges one whole (concrete / pictorial)	
10		read and write decimal numbers as fractions 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 solve problems involving number up to three decimal places	Nothing on NCETM	LO: Know how to add numbers with the same amount of decimal places (formal) LO: Know how to subtract numbers with the same amount of decimal places (formal) LO: Know how to add numbers with different amounts of decimal places (formal) LO: Know how to subtract numbers with different amounts of decimal places (formal)	

11		read and write decimal numbers as fractions 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 solve problems involving number up to three decimal places	Nothing on NCETM recognise and use factor pairs and commutativity in mental calculations	LO: know how to add and subtract wholes and decimals (take your time on subtracting from wholes – this could be over two lessons, with adding only taking half a lesson) LO: identify numbers with a decimal sequence LO: know how to multiply and divide decimals by 10, 100 and 1000	
12	**Consolidation and Assessment**				