



WALT: We Are Learning To
WAP: We Are Practising

Spring 2: Highgate N6

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	Number Fractions (2)	<ul style="list-style-type: none"> compare and order fractions whose denominators are all multiples of the same number add fractions with the same denominator and denominators that are multiples of the same number <p>WALT find common denominators and common numerators to compare fractions WALT find common denominators to compare fractions greater than 1 WALT different ways of using a bar model to add and subtract fractions WALT add fractions less than 1 using a bar model WALT use a bar model to add more than 2 fractions</p>	<ul style="list-style-type: none"> Compare and order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions Add fractions within 1 Add 3 or more fractions 	Bar model, cubes	<p>Give an example ...of a fraction that is more than three quarters but less than one whole. Now another example that no one else will think of. Explain how you know. Do, then explain Imran put these fractions in order starting with the smallest. Are they in the correct order? Two fifths, three tenths, four twentieths How do you know? NRICH Linked Chains</p>	Times tables and associated division facts
2		<ul style="list-style-type: none"> add and subtract fractions with the same denominator and denominators that are multiples of the same number <p>WALT use pictorial methods to add fractions WALT partition mixed numbers to add them WALT different methods of subtracting fractions WALT subtract a proper fraction from a mixed number WALT break a whole when subtracting from a mixed number</p>	<ul style="list-style-type: none"> Add fractions Add mixed numbers Subtract fractions Subtract mixed numbers Subtract – breaking the whole 	Bar model, fraction diagrams, number line	<p>What do you notice? $\frac{3}{4}$ and $\frac{1}{4} = \frac{4}{4} = 1$ $\frac{4}{4}$ and $\frac{1}{4} = \frac{5}{4} = 1 \frac{1}{4}$ $\frac{5}{4}$ and $\frac{1}{4} = \frac{6}{4} = 1 \frac{1}{2}$ Continue the pattern up to the total of 2. Can you make up a similar pattern for subtraction? NRICH A4 Fraction Addition NRICH A4 Fraction Subtraction</p>	Mental addition and subtraction

3	<ul style="list-style-type: none"> 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 <p>WALT use pictorial methods to subtract mixed numbers WALT use flexible partitioning and converting to subtract mixed numbers WALT multiply unit fractions WALT multiply non-unit fractions WALT multiply mixed numbers</p>	<ul style="list-style-type: none"> Subtract 2 mixed numbers Multiply unit fractions by an integer Multiply non-unit fractions by an integer Multiply mixed numbers by integers 	Bar model, fraction diagram, number line	<p>Continue the pattern $\frac{1}{4} \times 3 =$ $\frac{1}{4} \times 4 =$ $\frac{1}{4} \times 5 =$ Continue the pattern for five more number sentences. How many steps will it take to get to 3? The answer is... $2 \frac{1}{4}$ What is the question? Top tips Give your top tips for multiplying fractions.</p>	Using known facts with the 4 operations
4	<ul style="list-style-type: none"> connect multiplication by a fraction to using fractions as operators (fractions of), and to division [non-statutory] continue to develop their understanding of fractions as numbers, measures and operators by finding fractions of numbers and quantities [non-statutory] <p>WAP using pictorial and numerical methods to find fractions of quantities WALT calculate fractions of an amount WAL how a fraction can be used as an operator WAP using fractions as operators WAP calculating using fractions (<i>not WRM</i>)</p>	<ul style="list-style-type: none"> Calculate fractions of a quantity (WRM revision) Fraction of an amount Using fractions as operators 	Bar model	<p>The answer is ... $1 \frac{2}{5}$ What is the question? Working backwards $\frac{5}{3}$ of 24 = 40 Write a similar sentence where the answer is 56. Odd one out Which is the odd one out, and why? $\frac{3}{4}$ of 48 $\frac{1}{2} \times 72$ $\frac{4}{5}$ of 50 $\frac{2}{3}$ of 54 Can you change the odd one out to make it fit? Make up your own 'odd one out' list like this one.</p>	Adding and subtracting fractions
5	<p>Number Decimals (1)</p>				
	<ul style="list-style-type: none"> identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths 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 read and write numbers with up to three decimal places solve problems involving number up to three decimal places 	<ul style="list-style-type: none"> Decimals up to 2 d.p. Decimals as fractions (1) Decimals as fractions (2) Understanding thousandths Thousandths as decimals 	Place value grid, place value counters, part-whole model, blank 100 square grid, bead string, number line, base-10 NB This week's work can be continued into the following week if needed	<p>What do you notice? One tenth of £41 One hundredth of £41 One thousandth of £41 Always, sometimes, never A digit in the thousandths place is worth less than a digit in the hundredths place. A number with thousandths is smaller than a number which only has hundredths. Use examples to prove that your answer is correct.</p>	Multiplying fractions and using as operators

	<p>WAL the value of each digit in a number with 2 decimal places</p> <p>WALT convert between fractions and numbers with 2 decimal places</p> <p>WALT convert between fractions and more complex decimal numbers</p> <p>WALT understand thousandths</p> <p>WALT represent thousandths as decimals and fractions</p>			<p>Spot the mistake</p> <p>One of these equations is incorrect. Which one, and can you correct it?</p> <p>$0.303 = 3 \text{ tenths and } 3 \text{ thousandths}$</p> <p>$0.303 = \text{no hundredths and } 3 \text{ thousandths}$</p> <p>$0.303 = 303 \text{ thousandths}$</p>	
6	<ul style="list-style-type: none"> 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 <p>WAP rounding decimals to the nearest whole number</p> <p>WAP rounding decimals to the nearest tenth</p> <p>WALT compare and order numbers with matching decimal places</p> <p>WALT compare and order numbers with unmatched decimal places</p>	<ul style="list-style-type: none"> Rounding decimals Order and compare decimals 	Place value counters, 10-frame, number line	<p>Missing symbol</p> <p>Put the correct symbol $<$ or $>$ in each box</p> <p>4.627  4.06</p> <p>12.317  12.31</p> <p>Explain how you know.</p> <p>Do, then explain</p> <p>Circle each decimal which when rounded to one decimal place is 6.2.</p> <p>6.32 6.23 6.27 6.17</p> <p>Explain your reasoning.</p> <p>Top tips</p> <p>Explain how to round decimal numbers to one decimal place.</p> <p>NRICH Round the Dice Decimals 2</p>	Geometry recap from Y4: shape, angles, coordinates