



7. Fractions and Decimals	Content of the Unit	Assumed prior learning (tested at the beginning of the unit)
Number of lessons (between 6 & 9)	<ul style="list-style-type: none"> Investigate fractions. Explore the relationship between fractions and decimals including conversion between the two. Explore the relationship between decimals and percentages. Explore the relationship between fractions and percentages. 	<ul style="list-style-type: none"> Write one quantity as a fraction of another where the fraction is less than 1 Write one quantity as a fraction of another where the fraction is greater than 1 Write a fraction in its lowest terms by cancelling common factors Convert between mixed numbers and top-heavy fractions Understand that a percentage means 'number of parts per hundred' Write a percentage as a fraction <p>Write a quantity as a percentage of another</p>
Assessment points and tasks	Written feedback points	Learning Outcomes (tested at the end and related to subject competences)
Pre test Post test (half term exams/ mock exams)	Diagnostic marking (TF)-(green sticker)-(PF)/(SF) Traffic lighting of exam papers For diagnostic marking use the topics in the adjacent 'Learning Outcomes' box. Use diagnostic marking in revision lesson.	<ul style="list-style-type: none"> Identify if a fraction is terminating or recurring Recall some decimal and fraction equivalents (e.g. tenths, fifths, eighths) Write a decimal as a fraction Write a fraction in its lowest terms by cancelling common factors Identify when a fraction can be scaled to tenths or hundredths Convert a fraction to a decimal by scaling (when possible) Use a calculator to change any fraction to a decimal Write a decimal as a percentage Write a fraction as a percentage

Lesson	Clear learning intentions	Clear success criteria	Hook	Presentation of content	Guided practice	Independent practice (homework)	Closure
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1	<p>Recap knowledge of earlier work on fractions.</p>	<ul style="list-style-type: none"> ● Can relate fractions to pictures. ● Can add and order fractions. ● Comfortable with the prior knowledge check list above. 	<p>Children to represent given fractions pictorially.</p>	<p>GCSE FOUNDATION P92-93</p>	<p>GCSE FOUNDATION p92-93 Q1-19 Prior Knowledge Checklist.</p>		<p>Discussion of GCSE Foundation p93 Q20 challenge.</p>
2	<p>To be able to spot equivalent fractions.</p> <p>To be able to cancel fractions to their simplest form.</p>	<p>Can determine whether two fractions are equivalent</p> <p>Can use equivalent fractions to compare fractions (changing denominator)</p> <p>Can cancel fractions to their simplest form</p>	<p>GCSE FOUNDATION P94 Q8</p>	<p>BOARDWORKS KS3 N5 s10-18</p> <p>Mathswatch New Spec. Clip 25 and 26 (Equivalent Fractions & Simplifying Fractions)</p>	<p>GCSE FOUNDATION P94 Q9-11</p>		<p>Whiteboard activity. Display fractions and ask children to fully simplify them. Include fractions such as 6/36 where the obvious cancellation (3/18) does not fully simplify the fraction.</p>
3	<ul style="list-style-type: none"> ● To see the link between fractions and division. ● Use this link to 	<ul style="list-style-type: none"> ● Can use long division to convert from a fraction to a decimal. 	<p>GCSE FOUNDATION p102 Q1-3</p>	<p>GCSE FOUNDATION p102 Key Point 9 Example 8</p>	<p>GCSE FOUNDATION P102 Q4-8</p>		<p>GCSE FOUNDATION P102 Q8</p>



	determine whether a fraction is a recurring or terminating decimal.	<p>Can use a calculator to convert from a fraction to a decimal.</p> <p>Can change the denominator to convert from a fraction to a decimal.</p> <p>Using this can see when a fraction will terminate / recur.</p>		<p>Boardworks KS3 N5 s37-39</p> <p>Also cover scaling method. E.g. convert $\frac{3}{4}$ to $\frac{75}{100}$ to 0.75. Look for equivalent fractions where the denominator is a power of 10.</p>			
4	Convert from decimals to fractions.	<p>Can recall common fractions as decimals ($\frac{1}{2}$, $\frac{1}{4}$).</p> <p>Can convert from decimals to fractions.</p> <p>Can use prior learning to</p>	Fraction to Decimal conversion revision. Write $\frac{2}{11}$ as a decimal. Write $\frac{3}{8}$ as a decimal. Which recurs and which terminates?	<p>Boardworks KS3 N5 s31-40</p> <p>Mathswatch New Spec. Clip 84 Fractions and Decimals.</p>	GCSE Foundation p102-103 Q9-17 (Includes problem solving based on previous three lessons).	Homework from Activelearn	Whiteboard activity converting decimals to fractions. Initially without cancellation then with cancellation.



		simplify converted fractions.					
5	Convert fractions to percentages and vice versa	<p>Can convert fractions to percentages</p> <p>Can convert percentages to fractions.</p> <p>Write one number as a percentage of another</p>	GCSE FOUNDATION p104-105 Q1-3	GCSE FOUNDATION p104-105 Example 10 Boardworks KS3 N7.1 s1-23 Mathswatch New Spec Clip 85 – Fractions, Percentages and Decimals.	GCSE FOUNDATION p104-105 Q4-14		GCSE FOUNDATION p105 Q15
6.	Convert Decimals to Percentages and vice versa	<p>Can Convert Decimals to Percentages</p> <p>Can convert percentages to decimals.</p> <p>Can use this to solve some percentage problems.</p>	GCSE FOUNDATION p106-107 Q1-2	GCSE FOUNDATION p106-107 Boardworks KS3 N7.1 s1-23 Mathswatch New Spec Clip 85 – Fractions, Percentages and Decimals.	GCSE FOUNDATION p106-107 Q3-13		GCSE FOUNDATION p106-107 Q14-15 (Problem Solving)



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Schemes of Work

7.	REVISION / HOMEWORK/ PROBLEM SOLVING.	Recap previous 6 lessons work and go over previously set homework.	GCCSE Foundation P110-118 Revision questions covering the previous chapter. Problem solving covering the previous chapter.	N/A		Homework from Activeteach	Mini Whiteboard Revision.
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