


Subject	Year	Month	
Mathematics	7	May	
<b>Topic:</b>			
PERCENTAGES			5 LESSONS
<b>Content (Intent)</b>			
<p><b>Prior Learning</b></p> <p>KEY STAGE 2</p> <ul style="list-style-type: none"> <li>• concept of a fraction as a proportion</li> <li>• equivalent fractions</li> <li>• equivalence between fractions</li> <li>• Use non-calculator methods to find a percentage of an amount</li> <li>• Convert between fractions, decimals and percentages</li> </ul>	<p><b>Future Learning</b></p> <p>Year 8– FDP Year 8– Multiplier Method Year 9– GCSE Percentages</p>		
<p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>• Write one quantity as a fraction of another (both fraction is less than 1 and greater than 1)</li> <li>• Write a quantity as a percentage of another (requires converting between fractions and percentages)</li> <li>• Compare two quantities using percentages</li> <li>• Know that percentage change = actual change ÷ original amount</li> <li>• Increasing and decreasing by a percentage (5,10,15,20,30,25,50)</li> </ul>	<p><b>For teaching purposes</b></p> <p>POSSIBLE QUESTIONS</p> <ul style="list-style-type: none"> <li>• Jenny says ‘1/10 is the same as proportion as 10% so 1/5 is the same proportion as 5%.’ What do you think? Why?</li> <li>• Show this fraction as part of a square / rectangle / number line / circle</li> <li>• Lenny calculates the % increase of £6 to £8 as 25%. Do you agree with Lenny? Explain your answer.</li> </ul> <p>POSSIBLE MISCONCEPTIONS</p> <ul style="list-style-type: none"> <li>• may not recognise that representing fractions as divisions of shapes must be equal in size</li> <li>• may not make the connection that a percentage is a different way of describing a proportion</li> <li>• may think that it is not possible to have a percentage greater than 100%</li> <li>• may think that since 1/10 is 10% therefore 1/5 would be 5%</li> <li>• may think that percentage change = actual change ÷ new amount</li> </ul>		
<b>Pedagogical notes (implementation)</b>		<b>How will understanding be assessed &amp; recorded (Impact)</b>	
<p><math>\frac{1}{3}</math> = ‘there are three equal parts and I take one’ <math>\frac{3}{4}</math> = ‘there are four equal parts and I take three’.</p> <p>To explore the equivalency of fractions use splitting of the same diagram in different ways.</p> <p><i>‘per cent’ (Latin) means ‘out of one hundred’ You could also link to the French number “cent”.</i></p> <p><b>Notation</b> Diagonal fraction bar / horizontal fraction bar</p>		<p><b>BAM task – Write as a fraction or a percentage</b></p> <p><b>End of Year Assessment in June/July</b></p> <p style="background-color: #e1eef6;"><b>How can parents help at home?</b></p> <p><b>MathsWatch clips (Qualifications KS3)</b> N24a, N24b, N32, N39a, N39b, R9a</p>	
<b>Further reading/discussion</b>			
<p><b>Reading / Enrichment</b></p> <p>NRICH: <a href="#">Teaching fractions with understanding</a> NCETM: <a href="#">Teaching fractions</a> NCETM: <a href="#">Departmental workshop: Fractions</a></p> <p>KM: <a href="#">Crazy cancelling, silly simplifying</a> NRICH: <a href="#">Rod fractions</a> KM: <a href="#">Stick on the Maths: Percentage increases and decreases</a> KM: <a href="#">Maths to Infinity: FDP RP</a> KM: <a href="#">Percentage methods</a></p>	<p><b>Literacy</b></p> <p>Fraction Improper fraction Proper fraction Vulgar fraction Top-heavy fraction Percentage Proportion</p>	<p><b>Numeracy Links</b></p>	<p><b>Careers Links</b></p> <p>Accounting and Finance Retail Careers Basic numeracy requirement for all careers</p>