

	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
Fractions	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.	<ul style="list-style-type: none"> <li>Simplify the following fraction to its lowest form. <math>\frac{48}{54}</math></li> <li>Convert these fractions to the same denominator. <math>\frac{2}{7}</math> <math>\frac{3}{8}</math></li> <li>Which is greater? <math>\frac{2}{3}</math> or <math>\frac{4}{7}</math></li> </ul>	<ul style="list-style-type: none"> <li>Is the following statement, always, sometimes or never true? ‘To simplify a fraction you divide the numerator and denominator by 2 over and over.’ Explain your answer using examples.</li> <li>Amy thinks that <math>\frac{2}{5}</math> in its simplest terms is <math>\frac{1}{2.5}</math> Do you agree? Convince me.</li> <li>Sara and her friend are adding fractions. Her friend is trying to put the following fractions into the same denominator. Sara tells her she doesn’t need because the answer is 1. Is she right? Explain why. <math>\frac{12}{24}</math> <math>\frac{14}{28}</math></li> </ul>	<ul style="list-style-type: none"> <li>A charity was asking for people to volunteer to help in their shop each day. Samantha said she would do <math>\frac{3}{8}</math> of Monday. Betty said she would do <math>\frac{6}{12}</math> of Monday. Who did more hours and by how many?</li> <li>Find 3 fractions that can be simplified 5 times.</li> <li>What fraction has a denominator of 30 and when it is simplified it becomes <math>\frac{2}{5}</math>?</li> </ul>

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Fractions	<p>Compare and order fractions, including fractions <math>&gt; 1</math></p>	<ul style="list-style-type: none"> <li>Order these fractions from smallest to largest  <math>\frac{1}{2}</math> <math>\frac{3}{7}</math> <math>\frac{4}{5}</math> <math>\frac{9}{10}</math></li> <li>Which is greater?  <math>2\frac{4}{5}</math> or <math>2\frac{3}{8}</math></li> <li>Write down 3 fractions that are larger than <math>\frac{2}{5}</math></li> <li>Use diagrams to show the difference in fractions.</li> </ul> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; width: 150px; height: 20px; background-color: red; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 150px; height: 20px;"></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; width: 150px; height: 20px; background-color: red; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 150px; height: 20px;"></div> </div>	<ul style="list-style-type: none"> <li>Sallie insists she had more pizza than her sister because she had <math>\frac{6}{8}</math> of hers and her sister had <math>\frac{5}{6}</math>. Is she correct? Explain how you know.</li> <li>Kayleigh says "All fractions are less than one". Do you agree? Convince me.</li> <li>Tom says "I have the fraction <math>4\frac{2}{5}</math> so to make it 1 whole I need to add <math>5\frac{3}{5}</math>". Do you agree? Explain your reasoning.</li> </ul>	<ul style="list-style-type: none"> <li>Three friends went shopping. Steve spent <math>\frac{3}{7}</math> of his money.  Alfie spent <math>\frac{4}{12}</math> of his money. Becky spent half of what Alfie spent. Order them from smallest to largest by what they spent.</li> <li>A family were eating tea. The dad ate everything on his plate; the mum ate half of what Dad ate. The sister ate a quarter of what Mum ate and the brother ate a half of what the sister ate. What fraction of their food did each person eat?</li> <li>From 1 pizza, Michael ate <math>\frac{3}{8}</math> and Kelsey ate <math>\frac{1}{7}</math>. How much pizza was left over?</li> </ul>

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Fractions	Associate a fraction with division and calculate decimal fraction equivalents [ for example, 0.375] for a simple fraction [for example $\frac{3}{8}$ ]	<ul style="list-style-type: none"> <li>Complete the table.                             <table border="1" style="margin: 10px 0;"> <tr> <td style="text-align: center;">1/8</td> <td style="text-align: center;">2/8</td> <td></td> </tr> <tr> <td style="text-align: center;">0.125</td> <td></td> <td style="text-align: center;">0.375</td> </tr> </table> </li> <li>Charlie divided 1 pizza into 5 pieces. If he ate 2 pieces, what decimal fraction of the pizza did he eat?</li> <li>Use a 1 place value counter. I want to divide this into 2? How can I do it? Exchange your 1 for ten tenths, now I can divide ten tenths into 2 which equals 0.5. So therefore 1 divided by 2 is 0.5 which is why <math>\frac{1}{2} = 0.5</math>.                             <div style="text-align: right; margin-top: 10px;">  </div> <p>Can you divide 1 by 4? What equivalence between fractions and decimal fractions does this show?</p> </li> </ul>	1/8	2/8		0.125		0.375	<ul style="list-style-type: none"> <li>Harry says <math>\frac{1}{2}</math> is equivalent to 1.2. Is he correct? Explain your answer.</li> <li><b>True or False</b> 0.3 is bigger than <math>\frac{1}{4}</math>. Explain your reasoning.</li> <li>Hannah says 'If I divide 2 by 8, I get the same answer as if I divide 1 by 4' Do you agree? Explain your answer using diagrams or counters.</li> </ul>	<ul style="list-style-type: none"> <li>Write a unit fraction which has a value of less than 0.5. Can you find 20 different unit fractions?</li> <li>Curtis used <math>\frac{1}{3}</math> of a can of paint to cover 3.5 square metres of wall. How much wall will one whole can of paint cover?</li> <li>Pete shares 6 bananas between some friends. Each friend gets 0.75 of a banana. How many friends does he share the bananas with?</li> </ul>
1/8	2/8									
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Fractions	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	<ul style="list-style-type: none"> <li>What fraction (in its simplest form) and percentage are equal to 0.65?</li> <li>Tom and Sam shared equally one third of a chocolate bar. What fraction of the chocolate bar did each child get?</li> <li>Last month Kira saved <math>\frac{3}{5}</math> of her £10 pocket money. She also saved 15% of her £20 birthday money. How much did she save altogether?</li> </ul>	<ul style="list-style-type: none"> <li>Which is the odd one out? Explain why. <math>\frac{2}{5}</math> <math>\frac{4}{10}</math> <math>\frac{3}{6}</math> <math>\frac{6}{15}</math> 0.4</li> <li>Put the following numbers into groups: <math>\frac{3}{4}</math>, <math>\frac{3}{2}</math>, 0.5, 1.25, <math>\frac{3}{8}</math>, 0.125. Explain your choices.</li> <li>Shafi says “All you do when converting percentages to decimals is put ‘0.’ in front of the number e.g. 78% is 0.78.” Do you agree? Prove it!</li> </ul>	<ul style="list-style-type: none"> <li>Three friends were competing in a race. Billy completed half of the race. Harrison completed 50% of what Billy completed and Charlotte completed 0.25 of what Billy completed. What fraction of the race did they each complete?</li> <li>Write decimal and percentages on flash cards and have them face down. In pairs, turn one over at a time. The first person to write down 5 equivalent fractions to the decimal/percentage wins a point.</li> <li><b>Snap!</b> Play the game snap but with equivalent decimals, percentages and fractions.</li> </ul>