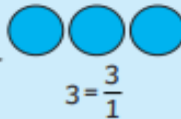
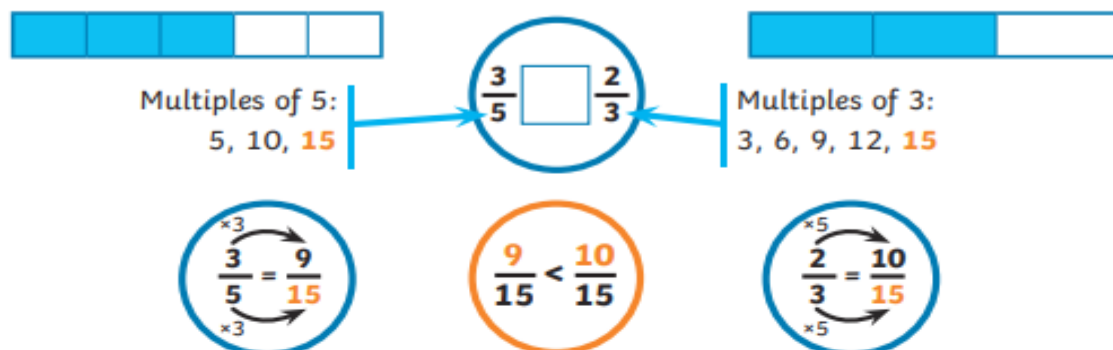
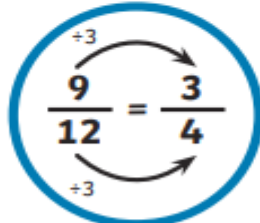
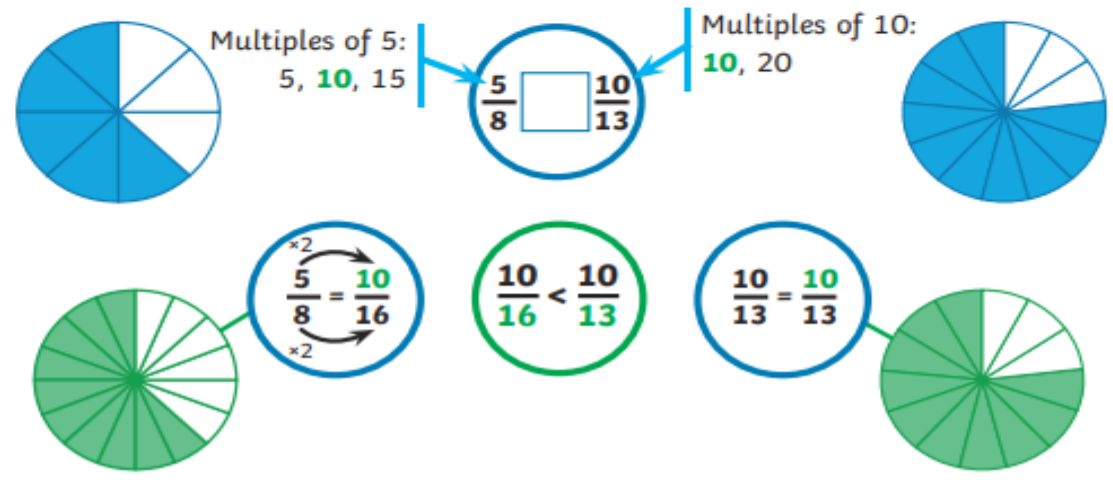


Fractions		Knowledge Organiser	
Adding and Subtracting Proper Fractions		Adding and Subtracting Mixed Numbers	
Same Denominators  $\frac{4}{7} + \frac{2}{7} = \frac{6}{7}$  $\frac{8}{11} - \frac{3}{11} = \frac{5}{11}$		Add or subtract the whole numbers and fractions separately. $2\frac{2}{5} + 1\frac{3}{10}$ $2 + 1 = 3$ $\frac{2}{5} + \frac{3}{10} = \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$ $3 + \frac{7}{10} = 3\frac{7}{10}$	
Different Denominators $\frac{2}{7} + \frac{3}{5}$ Multiples of 7: 7, 14, 21, 28, 35 Multiples of 5: 5, 10, 15, 20, 25, 30, 35 $\frac{2}{7} = \frac{10}{35}, \frac{3}{5} = \frac{21}{35}$ $\frac{10}{35} + \frac{21}{35} = \frac{31}{35}$		$2\frac{1}{2} - 1\frac{1}{4}$ $2 - 1 = 1$ $\frac{1}{2} - \frac{1}{4} = \frac{2}{4} - \frac{1}{4} = \frac{1}{4}$ $1 + \frac{1}{4} = 1\frac{1}{4}$	
Multiplying Proper Fractions Multiplying Fractions by Fractions $\frac{1}{2} \times \frac{1}{3} = \frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$		Convert the mixed numbers to improper fractions. $2\frac{2}{5} + 1\frac{3}{10}$ $2\frac{2}{5} = \frac{12}{5}$ $1\frac{3}{10} = \frac{13}{10}$ $\frac{12}{5} + \frac{13}{10} = \frac{24}{10} + \frac{13}{10} = \frac{37}{10}$ $\frac{37}{10} = 3\frac{7}{10}$	
Multiplying Fractions by Whole Numbers  $\frac{2}{5} \times 3$  $3 = \frac{3}{1}$ $\frac{2}{5} \times \frac{3}{1} = \frac{6}{5} = 1\frac{1}{5}$		$2\frac{1}{2} - 1\frac{1}{4}$ $2\frac{1}{2} = \frac{5}{2}$ $1\frac{1}{4} = \frac{5}{4}$ $\frac{5}{2} - \frac{5}{4} = \frac{10}{4} - \frac{5}{4} = \frac{5}{4}$ $\frac{5}{4} = 1\frac{1}{4}$	
Dividing Fractions by Whole Numbers $\frac{2}{5} \div 2 = \frac{1}{5}$ Multiplication and division are the inverse of one another so: $\div 2$ is the same as $\times \frac{1}{2}$ $\frac{2}{5} \times \frac{1}{2} = \frac{2}{10}$			

Fractions		Knowledge Organiser	
Key Vocabulary	Simplify Fractions	Compare and Order Fractions	
numerator	 Factors of 9: 1, 3, 9 Factors of 12: 1, 2, 3, 4, 6, 12	Use the Common Denominator 	
denominator			
proper fraction			
improper fraction			
factor			
highest common multiple			
lowest common multiple	  	Use the Common Numerator 	
equivalents			
common numerator			
common denominator			
decimal equivalent			
simplify			
simplest form			
mixed number			
whole number			
mixed number			
Year 6			