

## Year 4 Fractions Knowledge Organiser.

Fractions	Knowledge Organiser																								
Key Vocabulary	Fraction Families																								
numerator	<b>1</b>																								
denominator	$\frac{1}{2}$   $\frac{1}{2}$																								
unit fraction	$\frac{1}{3}$   $\frac{1}{3}$   $\frac{1}{3}$																								
non-unit fraction	$\frac{1}{4}$   $\frac{1}{4}$   $\frac{1}{4}$   $\frac{1}{4}$																								
equivalent	$\frac{1}{5}$   $\frac{1}{5}$   $\frac{1}{5}$   $\frac{1}{5}$   $\frac{1}{5}$																								
quantities	$\frac{1}{6}$   $\frac{1}{6}$   $\frac{1}{6}$   $\frac{1}{6}$   $\frac{1}{6}$   $\frac{1}{6}$																								
whole	$\frac{1}{7}$   $\frac{1}{7}$   $\frac{1}{7}$   $\frac{1}{7}$   $\frac{1}{7}$   $\frac{1}{7}$   $\frac{1}{7}$																								
halves	$\frac{1}{8}$   $\frac{1}{8}$   $\frac{1}{8}$   $\frac{1}{8}$   $\frac{1}{8}$   $\frac{1}{8}$   $\frac{1}{8}$   $\frac{1}{8}$																								
thirds	$\frac{1}{9}$   $\frac{1}{9}$   $\frac{1}{9}$   $\frac{1}{9}$   $\frac{1}{9}$   $\frac{1}{9}$   $\frac{1}{9}$   $\frac{1}{9}$																								
quarters	$\frac{1}{10}$   $\frac{1}{10}$   $\frac{1}{10}$   $\frac{1}{10}$   $\frac{1}{10}$   $\frac{1}{10}$   $\frac{1}{10}$   $\frac{1}{10}$   $\frac{1}{10}$																								
fifths	$\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$   $\frac{1}{11}$																								
sixths	$\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$   $\frac{1}{12}$																								
sevenths																									
eighths	Fractions of Quantities																								
ninths	<b>To find a fraction of a number, divide by the denominator and multiply by numerator.</b>																								
tenths	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>To find quarters of 20:</b></p> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #00AEEF; color: white;"><td colspan="4">20</td></tr> <tr style="background-color: #FFC000;"><td>5</td><td>5</td><td>5</td><td>5</td></tr> </table> <p><math>\frac{1}{4}</math> of 20 = 5    <math>\frac{2}{4}</math> of 20 = 10    <math>\frac{3}{4}</math> of 20 = 15    <math>\frac{4}{4}</math> of 20 = 20</p> </div> <div style="width: 45%;"> <p><b>To find eighths of 56:</b></p> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #90EE90;"><td colspan="8">56</td></tr> <tr style="background-color: #FF8C00;"><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td></tr> </table> <p><math>\frac{1}{8}</math> of 56 = 7    <math>\frac{2}{8}</math> of 56 = 14    <math>\frac{3}{8}</math> of 56 = 21    <math>\frac{4}{8}</math> of 56 = 28  <math>\frac{5}{8}</math> of 56 = 35    <math>\frac{6}{8}</math> of 56 = 42    <math>\frac{7}{8}</math> of 56 = 49    <math>\frac{8}{8}</math> of 56 = 56</p> </div> </div>	20				5	5	5	5	56								7	7	7	7	7	7	7	7
20																									
5	5	5	5																						
56																									
7	7	7	7	7	7	7	7																		
elevenths																									
twelfths																									
quantities																									
visit <a href="https://www.twinkl.com">twinkl.com</a>																									

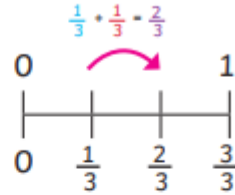
## Fractions

## Knowledge Organiser

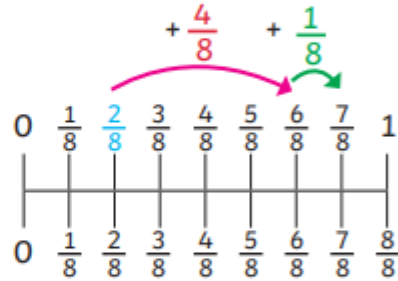
### Adding Fractions

Fractions can be added when the denominators are the same.

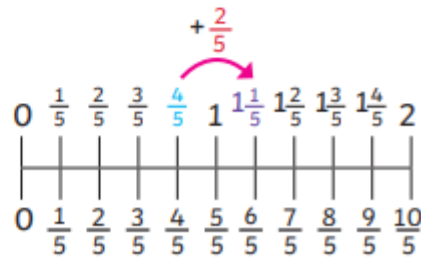
$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$



$$\frac{2}{8} + \frac{4}{8} + \frac{1}{8} = \frac{7}{8}$$



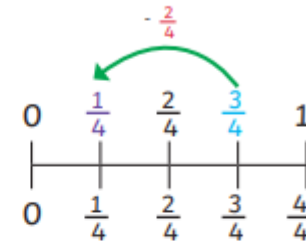
$$\frac{4}{5} + \frac{2}{5} = \frac{6}{5} \text{ or } 1\frac{1}{5}$$



### Subtracting fractions

Fractions can be subtracted when the denominators are the same.

$$\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$$



$$\frac{8}{6} - \frac{5}{6} = \frac{3}{6}$$

