

1) Place these fractions in order starting with the smallest size fraction :

$\frac{1}{12}$	$\frac{1}{9}$	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{2}$
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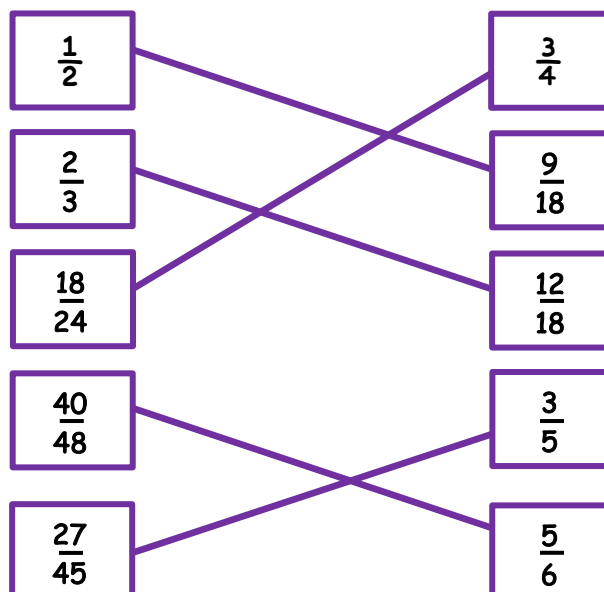
Although this is not a year 6 objective you need to ensure that the children have understanding of the relationship between fractions and what a fraction actually is before encouraging children to convert and simplify. Ensure that the children understand that the size of the denominator indicates how large the fraction is initially. Some children may put $\frac{1}{12}$ as largest as looking at the amount on the denominator rather than understanding that it is shared by 12.

2) Order these fractions starting with the largest size fraction:

$\frac{12}{8}$	$\frac{5}{4}$	$\frac{12}{12}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{3}$
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Children may have worked out the fractions as simpler ones to help them or have drawn illustrations. Encourage children to develop strategies such as these to help them to work this out: jottings, calculations and notes are all part of being an efficient mathematician. $\frac{12}{8}$ is larger than $\frac{8}{8}$ (1 whole) so this is 1 whole and $\frac{4}{8}$ which is the same as $1\frac{1}{2}$.

3) Draw lines to match the equivalent fraction pairs:



Children should show understanding of using factors and multiples to find the equivalent fractions.

4) Simplify these fractions in their simplest form.

$$\frac{20}{15}$$

$$\frac{3}{4}$$

$$\frac{64}{32}$$

$$\frac{1}{2}$$

$$\frac{22}{88}$$

$$\frac{1}{4}$$

$$\frac{12}{36}$$

$$\frac{1}{3}$$

5) Place these fractions in order starting with the smallest size fraction :

$$\frac{1}{2}$$

$$\frac{2}{3}$$

$$\frac{7}{9}$$

$$\frac{5}{6}$$

Children should have found a common multiple and used this to find fractions with the same denominator to help them to compare the size of the fractions. Encourage children to have made jottings to help them, however they must ensure that their answers are written with the same denominator in the question.

6) What is $\frac{5}{8} + \frac{6}{8}$

Some children may have added the 8 and 8 as well. Lots of practical activities will need to be selected to address this misconception.

$$\frac{11}{8}$$

7) Add $\frac{4}{5}$ and $\frac{2}{3}$

common denominator = 15

$\frac{4}{5} \times 3 = \frac{12}{15}$ then $\frac{2}{3} \times 5 = \frac{10}{15}$ add numerators together

$$\frac{22}{15}$$

8) What is $\frac{8}{9} - \frac{6}{9}$

$$\frac{2}{9}$$

9) Subtract $\frac{2}{5}$ from $\frac{3}{4}$

Common denominator = 20

$\frac{2}{5} \times 4 = \frac{8}{20}$ $\frac{3}{4} \times 5 = \frac{15}{20}$

$\frac{15}{20} - \frac{8}{20} = \frac{7}{20}$

You may also here need to spot errors where the child has misunderstood subtract from.

$$\frac{7}{20}$$

10) Subtract $\frac{4}{5}$ from $1\frac{2}{3}$

you are looking for children to convert the mixed number into $\frac{5}{3}$ (some children may have found common denominator and then converted it from a mixed number)

then look for a common denominator

$$\frac{4}{5} \times 3 = \frac{12}{15} \quad \text{and} \quad \frac{5}{3} \times 5 = \frac{25}{15}$$

$$\frac{25}{15} - \frac{12}{15} = \frac{13}{15}$$

$$\frac{13}{15}$$

11) Four children order one pizza each. They all leave $\frac{2}{3}$ of their pizza. What fraction of pizza is left altogether?



Here you are looking for children to understand that they need to

$$\frac{2}{3} \times 4 = \frac{8}{3}$$

Some children may have used illustrations to help or repeatedly added the thirds.

$$\frac{8}{3} \quad \text{or} \quad 2\frac{2}{3}$$

12) $\frac{2}{3} \times \frac{4}{5} =$

$\frac{8}{15}$

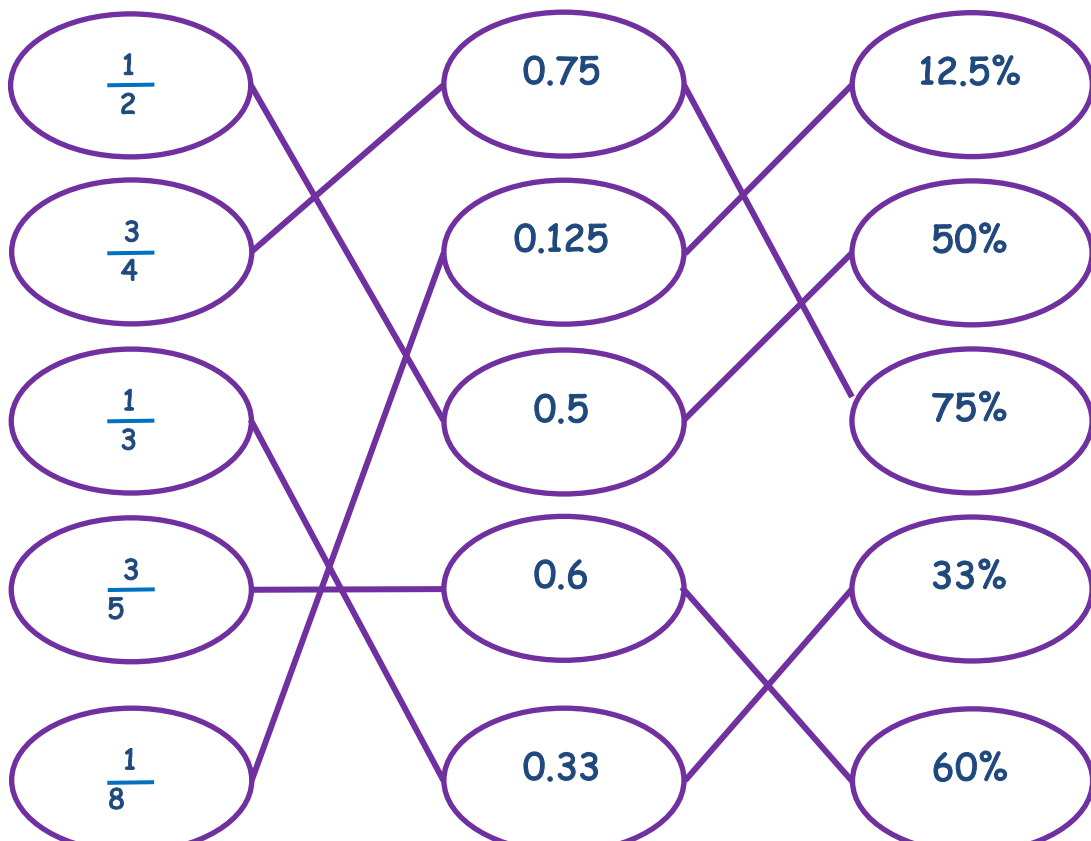
Children to show understanding that both the numerator and denominator are multiplied. You may want to look at this in further depth when selecting activities to ensure that children also have the understanding of why this occurs.

13) $\frac{1}{4} \div 4 =$

$\frac{1}{16}$

Children may have drawn an illustration to help or may know that the whole number can be multiplied by the denominator. You may want to look at this in further depth when selecting activities to ensure that children also have the understanding of why this occurs.

14) Match each fraction to its decimal and percentage equivalent:



15) Write the value of the digit underlined in each set of numbers.

a) 34. 568

6 hundredths

b) 563. 567

5 tenths

16) $12 \times 4.5 =$

	x	1	2																
			4	5															
	+		6	0															
		4	8																
		5	4																
		₁																	

Some children may have done this mentally or x by 10 first to remove the decimal point. There are more opportunities to explore this objective in the multiplication area for year 6 on the website.

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17) Work out this sum and express the remainder as a decimal.

c)																			
		1	6	7	7	5													
	4	6	7	1	0	0													

167.75