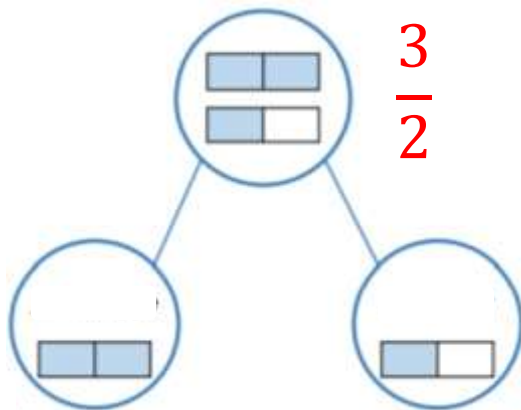


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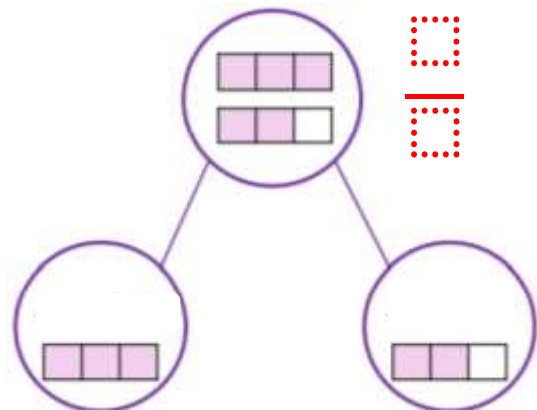
Maths Tasks – Blue Challenge

Using each part-whole model shown below, identify the fraction and then write how many 'wholes' and 'parts' there are in each fraction.

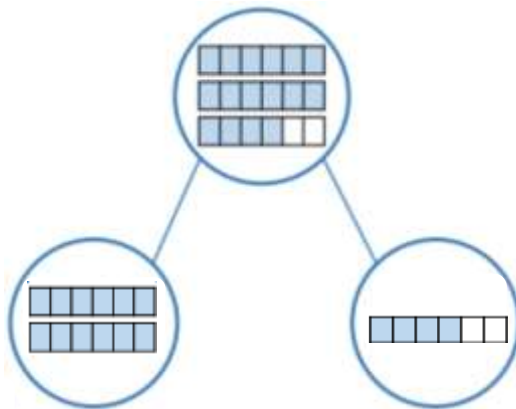
The first one has been done for you.



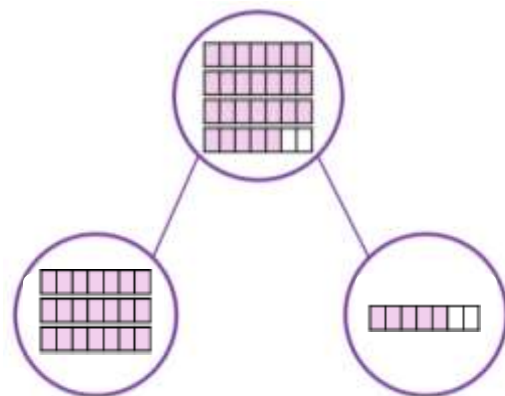
$$\frac{3}{2} = 1 \text{ whole and } 1 \text{ part}$$
$$= 1 + \frac{1}{2}$$



$$\frac{\square}{\square} = _ \text{ whole and } _ \text{ parts}$$
$$= _ + \frac{\square}{\square}$$



$$\frac{\square}{\square} = _ \text{ wholes and } _ \text{ parts}$$
$$= _ + \frac{\square}{\square}$$



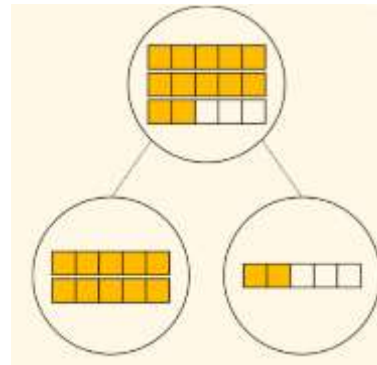
$$\frac{\square}{\square} = _ \text{ wholes and } _ \text{ parts}$$
$$= _ + \frac{\square}{\square}$$

More blue challenge on the next page



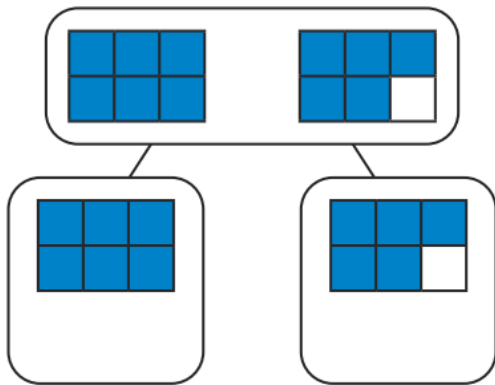
$$\frac{13}{10} = \text{__ wholes and __ parts}$$

$$\frac{13}{10} = \text{__} + \frac{3}{10}$$



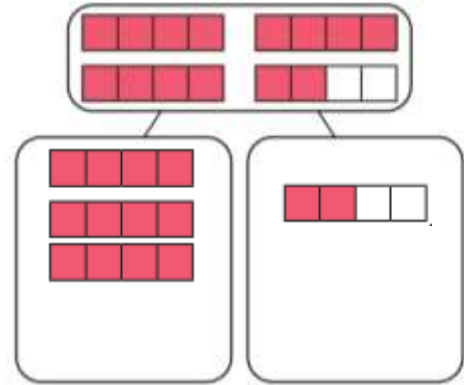
$$\frac{13}{10} = \text{__ wholes and __ parts}$$

$$\frac{13}{10} = \text{__} + \frac{3}{10}$$



$$\frac{13}{10} = \text{__ wholes and __ parts}$$

$$\frac{13}{10} = \text{__} + \frac{3}{10}$$



$$\frac{13}{10} = \text{__ wholes and __ parts}$$

$$\frac{13}{10} = \text{__} + \frac{3}{10}$$

Now draw your own part-whole model to represent your own fraction.

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Maths Tasks – Green Challenge

Use your knowledge of multiplication / division to help you convert these improper fractions into ___ wholes + ___ parts and then into mixed numbers. You may want to show your working out too.

The first one has been done for you.

$$\frac{7}{3} \quad 3 \times 2 = 6 \text{ so} \quad = 2 \text{ wholes} + 1 \text{ part} = 2\frac{1}{3}$$

$$\frac{9}{4} = \text{___ wholes} + \text{___ part} =$$

$$\frac{5}{2} = \text{___ wholes} + \text{___ part} =$$

$$\frac{8}{5} = \text{___ whole} + \text{___ parts} =$$

$$\frac{11}{2} = \text{___ wholes} + \text{___ part} =$$

$$\frac{14}{4} = \text{___ wholes} + \text{___ parts} =$$

$$\frac{17}{5} = \text{___ wholes} + \text{___ parts} =$$

$$\frac{13}{6} = \text{___ wholes} + \text{___ part} =$$

More green challenge on the next page

$$\frac{17}{3}$$

$$= \text{___ wholes} + \text{___ parts} =$$

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

$$= \text{___ whole} + \text{___ parts} =$$

$$\frac{15}{2}$$

$$= \text{___ wholes} + \text{___ part} =$$

$$\frac{11}{3}$$

$$= \text{___ wholes} + \text{___ parts} =$$

$$\frac{22}{9}$$

$$= \text{___ wholes} + \text{___ parts} =$$

$$\frac{34}{10}$$

$$= \text{___ wholes} + \text{___ parts} =$$

$$\frac{20}{6}$$

$$= \text{___ wholes} + \text{___ parts} =$$

$$\frac{18}{4}$$

$$= \text{___ wholes} + \text{___ parts} =$$

$$\frac{27}{2}$$

$$= \text{___ wholes} + \text{___ part} =$$

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Maths Tasks – White Challenge

If I have $\frac{15}{7}$, how many wholes and how many parts do I have?

Complete the calculation below.

$$\frac{15}{7} = \boxed{} \frac{\boxed{}}{7}$$

If I have $\frac{31}{9}$, how many wholes and how many parts do I have?

Complete the calculation below.

$$\frac{31}{9} = \boxed{} \frac{\boxed{}}{9}$$

Which one is the odd one out? Prove it!

$\frac{21}{7}$

$\frac{12}{4}$

$\frac{10}{3}$

$\frac{18}{6}$

Rosie says,



$\frac{16}{4}$ is greater than $\frac{8}{2}$
because 16 is greater
than 8

3 friends share some pizzas.
Each pizza is cut into 8 equal slices.
Altogether, they eat 25 slices.
How many whole pizzas do they eat?

Do you agree?
Explain why.

More white challenge on the next page

The children ate some pizza. Each pizza was cut into 6 slices.

<div data-bbox="193 217 408 315" data-label="Text"><p>I ate 12 slices.</p></div> <div data-bbox="193 315 408 566" data-label="Image"><p>Pierre</p></div>	<div data-bbox="472 217 687 315" data-label="Text"><p>I ate 6 slices.</p></div> <div data-bbox="472 315 687 566" data-label="Image"><p>Pam</p></div>	<div data-bbox="743 217 959 315" data-label="Text"><p>I ate 9 slices.</p></div> <div data-bbox="743 315 959 566" data-label="Image"><p>Jon</p></div>	<div data-bbox="1023 217 1238 315" data-label="Text"><p>I ate 3 slices.</p></div> <div data-bbox="1023 315 1238 566" data-label="Image"><p>Anya</p></div>
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a) Who ate exactly 2 whole pizzas?

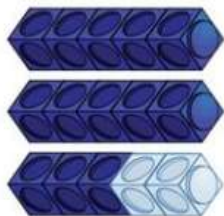
b) What fraction of pizza did Jon eat?

c) Who ate less than a whole pizza?

d) Who ate $\frac{6}{6}$ slices of pizza?

e) Who ate half a pizza? Prove it!

Spot the mistake.



$$\frac{13}{5} = 10 \text{ wholes and } 3 \text{ fifths}$$

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Maths Tasks – White+ Extension

- a) Use the digit cards to make improper fractions (where the numerator is larger than the denominator) that equal 4 whole ones. Your denominator can only be a single-digit number. Each digit card may only be used once per solution. Find all 9 possibilities. One has been done for you.



$$\frac{12}{3}$$

- b) What do you notice about the numerator and the denominator in each fraction that you found?
-
-

Use the digit cards to create different fractions and sort them into the boxes below. You can use each number card more than once.

Fractions less than one

Fractions equal to a whole
number greater than 1

Fractions greater than one

12

4

8

10

16

15

9

6

7

30

17

11

18

3

Investigate the different fractions that can be made and sort them correctly.