



# Y5

# Remote Learning

# ANSWER PACK

*22<sup>nd</sup> - 26<sup>th</sup> February*

*2021*



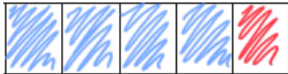

# Maths Answers: Lesson 1

## Add and subtract fractions

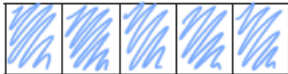



1 Complete the calculations.

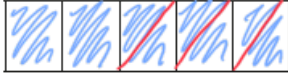
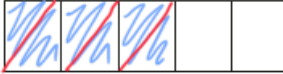
Use the bar models to help you.

a)  

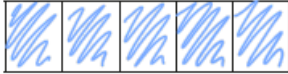
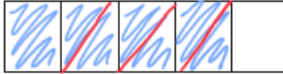
$$\frac{4}{5} + \frac{3}{5} = \frac{7}{5} = 1\frac{2}{5}$$

b)  

$$\frac{6}{5} + \frac{3}{5} = \frac{9}{5} = 1\frac{4}{5}$$

c)  

$$\frac{8}{5} - \frac{6}{5} = \frac{2}{5}$$

d)  

$$\frac{9}{5} - \frac{3}{5} = \frac{6}{5} = 1\frac{1}{5}$$

2 Complete the calculations.

a)  $\frac{4}{7} + \frac{2}{7} = \frac{6}{7}$

f)  $\frac{17}{9} - \frac{8}{9} = \frac{9}{9} = 1$

b)  $\frac{4}{7} + \frac{3}{7} = \frac{7}{7} = 1$

g)  $\frac{16}{9} - \frac{8}{9} = \frac{8}{9}$

c)  $\frac{4}{7} + \frac{4}{7} = \frac{8}{7} = 1\frac{1}{7}$

h)  $\frac{7}{9} + \frac{2}{9} + \frac{8}{9} = \frac{17}{9} = 1\frac{8}{9}$

d)  $\frac{8}{7} - \frac{3}{7} = \frac{5}{7}$

i)  $\frac{7}{15} + \frac{2}{15} + \frac{8}{15} = \frac{17}{15} = 1\frac{2}{15}$

e)  $\frac{7}{9} + \frac{8}{9} = \frac{15}{9} = 1\frac{2}{3}$

j)  $\frac{7}{15} - \frac{2}{15} + \frac{8}{15} = \frac{13}{15}$

3

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$

What could the missing numerators be?

Give six different possibilities.

e.g.

$$\frac{1}{8} + \frac{12}{8} = \frac{13}{8}$$

$$\frac{4}{8} + \frac{9}{8} = \frac{13}{8}$$

$$\frac{2}{8} + \frac{11}{8} = \frac{13}{8}$$

$$\frac{5}{8} + \frac{8}{8} = \frac{13}{8}$$

$$\frac{3}{8} + \frac{10}{8} = \frac{13}{8}$$

$$\frac{7}{8} + \frac{6}{8} = \frac{13}{8}$$



- 4 Dora has  $2\frac{3}{8}$  litres of juice.

She pours out  $\frac{9}{8}$  litres of juice.

How many litres of juice does she have left?

Dora has  $1\frac{1}{4}$  litres left.

- 5 Fill in the missing numerators.

a)  $\frac{3}{8} + \frac{\boxed{10}}{8} = \frac{13}{8}$

b)  $\frac{13}{8} - \frac{\boxed{6}}{8} = \frac{7}{8}$

c)  $\frac{13}{8} - \frac{\boxed{5}}{8} = 1$

d)  $\frac{11}{9} + \frac{\boxed{11}}{9} = \frac{22}{9} = 2\frac{\boxed{4}}{9}$

e)  $\frac{11}{9} + \frac{\boxed{9}}{9} = \frac{\boxed{20}}{9} = 2\frac{2}{9}$

f)  $\frac{22}{9} - \frac{\boxed{2}}{9} = \frac{\boxed{20}}{9} = 2\frac{2}{9}$

g)  $\frac{4}{7} + \frac{\boxed{6}}{7} + \frac{4}{7} = 2$

h)  $\frac{5}{7} + \frac{\boxed{4}}{7} + \frac{5}{7} = 2$

i)  $\frac{6}{7} + \frac{\boxed{2}}{7} + \frac{6}{7} = 2$

j)  $\frac{14}{7} + \frac{\boxed{3}}{7} + \frac{4}{7} = 3$

k)  $\frac{15}{7} + \frac{\boxed{1}}{7} + \frac{5}{7} = 3$

l)  $\frac{16}{7} + \frac{\boxed{6}}{7} + \frac{6}{7} = 4$

Compare answers with a partner. What do you notice?



- 6 Here are some fraction cards.

$\frac{9}{8}$   $\frac{13}{8}$   $\frac{1}{8}$   $\frac{7}{8}$   $\frac{3}{8}$   $1\frac{7}{8}$

Use the cards to write pairs of fractions with a total of 2

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

$\frac{13}{8} + \frac{3}{8} = 2$

$\frac{9}{8} + \frac{7}{8} = 2$

- 7 Annie and Dexter both have a skipping rope.

Annie's rope is  $\frac{3}{4}$  m shorter than Dexter's rope.

The ropes are  $\frac{13}{4}$  m altogether.

How long is each skipping rope?

Annie's rope is  $1\frac{1}{4}$  m long.

Dexter's rope is 2 m long.



## Red Tasks

### Varied Fluency

1a. A

2a.  $\frac{3}{7} + \frac{1}{7} = \frac{4}{7}$

3a.  $\frac{4}{9}$

4a. Altogether they have drunk  $\frac{7}{8}$ .

## Gold Tasks

### Varied Fluency

9a. C

10a.  $\frac{5}{6} + \frac{3}{6} = \frac{8}{6} = 1 \frac{1}{3}$

11a.  $\frac{1}{2}$

12a. Altogether they have completed  $1 \frac{1}{2}$  laps of the running track.

### Reasoning & Problem Solving

1a. Mel is incorrect as the missing numerator is 2.

2a. Various answers where the numerator totals 5, for example:  $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$ .

3a.  $\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$  or  $\frac{4}{8} + \frac{3}{8} = \frac{7}{8}$

### Reasoning & Problem Solving

7a. Asha is incorrect. The missing numerator is 3 because  $\frac{18}{12} - \frac{3}{12} = 1 \frac{3}{12}$  and  $1 \frac{3}{12} = 1 \frac{1}{4}$ .

8a. Various answers where the numerators total 12, for example:  $\frac{5}{9} + \frac{7}{9} = 1 \frac{1}{3}$ .

9a.  $\frac{12}{15} + \frac{8}{15} = 1 \frac{1}{3}$

### Deepen the moment...

1) There are six possible answers:

$$\frac{4}{5} + \frac{0}{5} < \frac{2}{5} + \frac{3}{5}$$

$$\frac{4}{5} + \frac{0}{5} < \frac{3}{5} + \frac{3}{5}$$

$$\frac{4}{5} + \frac{0}{5} < \frac{4}{5} + \frac{3}{5}$$

$$\frac{4}{5} + \frac{1}{5} < \frac{3}{5} + \frac{3}{5}$$

$$\frac{4}{5} + \frac{1}{5} < \frac{4}{5} + \frac{3}{5}$$

$$\frac{4}{5} + \frac{2}{5} < \frac{4}{5} + \frac{3}{5}$$

2) There are 10 possible solutions:

$$\frac{1}{6} + \frac{2}{6} < \frac{8}{6} - \frac{1}{6}$$

$$\frac{1}{6} + \frac{2}{6} < \frac{8}{6} - \frac{2}{6}$$

$$\frac{1}{6} + \frac{2}{6} < \frac{8}{6} - \frac{3}{6}$$

$$\frac{1}{6} + \frac{2}{6} < \frac{8}{6} - \frac{4}{6}$$

$$\frac{2}{6} + \frac{2}{6} < \frac{8}{6} - \frac{1}{6}$$

$$\frac{2}{6} + \frac{2}{6} < \frac{8}{6} - \frac{2}{6}$$

$$\frac{2}{6} + \frac{2}{6} < \frac{8}{6} - \frac{3}{6}$$

$$\frac{3}{6} + \frac{2}{6} < \frac{8}{6} - \frac{1}{6}$$

$$\frac{3}{6} + \frac{2}{6} < \frac{8}{6} - \frac{2}{6}$$

$$\frac{4}{6} + \frac{2}{6} < \frac{8}{6} - \frac{1}{6}$$





## Maths Answers: Lesson 2

### Add fractions within 1



1 Complete the additions.

Use the bar models to help you.

a)



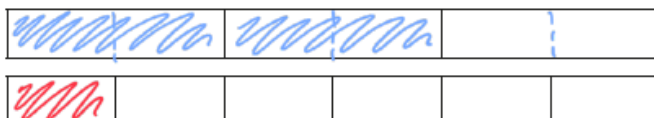
$$\frac{1}{2} + \frac{1}{6} = \frac{2}{3}$$

b)



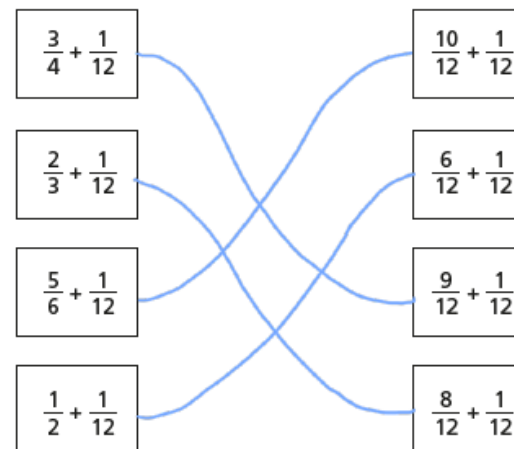
$$\frac{1}{3} + \frac{1}{6} = \frac{1}{2}$$

c)



$$\frac{2}{3} + \frac{1}{6} = \frac{5}{6}$$

2 Match the additions that have the same answer.



3 Here are two jugs.



One jug contains  $\frac{5}{18}$  litres of water.

The other jug contains  $\frac{4}{9}$  litres of water.

How many litres of water are there altogether?

There are  $\frac{13}{18}$  litres of water altogether.



- 4 a) Complete the calculations.

$$\begin{aligned} \frac{1}{5} + \frac{1}{10} &= \frac{3}{10} \\ \frac{2}{5} + \frac{1}{10} &= \frac{5}{10} \\ \frac{3}{5} + \frac{1}{10} &= \frac{7}{10} \\ \frac{4}{5} + \frac{1}{10} &= \frac{9}{10} \end{aligned}$$

$(\frac{1}{2})$

$$\begin{aligned} \frac{1}{16} + \frac{5}{32} &= \frac{3}{32} \\ \frac{1}{8} + \frac{5}{32} &= \frac{9}{32} \\ \frac{1}{4} + \frac{5}{32} &= \frac{13}{32} \\ \frac{1}{2} + \frac{5}{32} &= \frac{21}{32} \end{aligned}$$

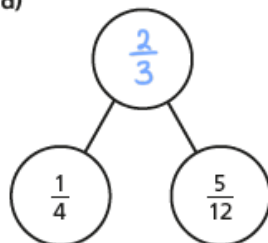
- b) Can you spot any patterns? Talk to a partner about it.  
c) What calculation would come next in each set?

$$\frac{5}{5} + \frac{1}{10} = \frac{11}{10} = 1\frac{1}{10}$$

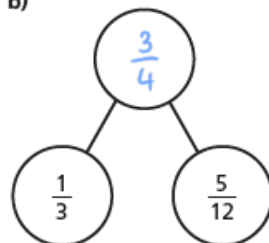
$$\frac{1}{1} + \frac{5}{32} = 1\frac{5}{32}$$

- 5 Complete the part-whole models.

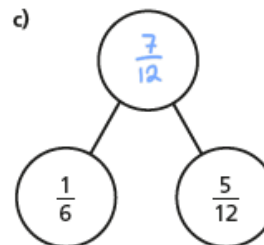
a)



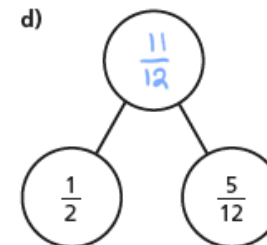
b)



c)



d)



6

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{16} = \frac{7}{8}$$

What could the missing numerators be?

Give six different possibilities.

$$\frac{1}{8} + \frac{12}{16} = \frac{7}{8}$$

$$\frac{3}{8} + \frac{8}{16} = \frac{7}{8}$$

$$\frac{5}{8} + \frac{4}{16} = \frac{7}{8}$$

$$\frac{2}{8} + \frac{10}{16} = \frac{7}{8}$$

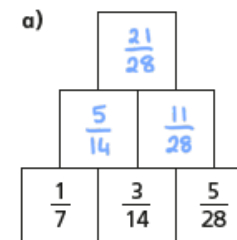
$$\frac{4}{8} + \frac{6}{16} = \frac{7}{8}$$

$$\frac{6}{8} + \frac{2}{16} = \frac{7}{8}$$

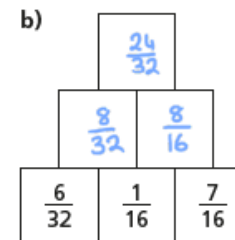
7

Complete the addition pyramids.

a)



b)



- c) What fraction is equivalent to both of the fractions at the top of the pyramids?

$$\frac{3}{5}$$



## Red Tasks

### Varied Fluency

1a.  $\frac{3}{4}$

2a.  $\frac{2}{4} + \frac{2}{8} = \frac{6}{8}$

3a.  $\frac{9}{12}$  or  $\frac{3}{4}$

4a. A

### Reasoning & Problem Solving

1a.  $\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$

2a. True because  $\frac{2}{3}$  is equivalent to  $\frac{4}{6}$   
and  $\frac{4}{6} + \frac{1}{6} = \frac{5}{6}$ .

3a. Various answers, for example:

$\frac{6}{10}$ ,  $\frac{7}{10}$ ,  $\frac{8}{10}$  or  $\frac{9}{10}$

## Gold Tasks

### Varied Fluency

9a.  $\frac{2}{3}$  (accept equivalent fractions)

10a.  $\frac{6}{15} + \frac{4}{10} = \frac{4}{5}$

11a.  $\frac{7}{8}$  (accept equivalent fractions)

12a. C

### Reasoning & Problem Solving

7a. Various answers, for example:

$\frac{3}{10} + \frac{2}{5} = \frac{14}{20}$ ,  $\frac{9}{30} + \frac{4}{10} = \frac{14}{20}$ ,  $\frac{3}{10} + \frac{6}{15} = \frac{21}{30}$

8a. False because  $\frac{4}{15} + \frac{7}{12} = \frac{16}{60} + \frac{35}{60} = \frac{51}{60}$ .

9a. Various answers, for example:

$\frac{19}{36}$ ,  $\frac{23}{36}$ ,  $\frac{27}{36}$  or  $\frac{31}{36}$

## Deepen the moment...

1) a) False:  $\frac{2}{8} + \frac{1}{4} = \frac{2}{8} + \frac{2}{8} = \frac{4}{8}$

b) True:  $\frac{4}{7} + \frac{2}{14} = \frac{8}{14} + \frac{2}{14} = \frac{10}{14}$

c) True:  $\frac{2}{5} + \frac{3}{15} = \frac{6}{15} + \frac{3}{15} = \frac{9}{15}$

d) False:  $\frac{2}{12} + \frac{2}{3} = \frac{2}{12} + \frac{8}{12} = \frac{10}{12}$

2) Harvey ate  $\frac{2}{6}$  which is equivalent to  $\frac{4}{12}$ , so he ate 4 slices.

Jacques ate  $\frac{1}{4}$  which is equivalent to  $\frac{3}{12}$ , so he ate 3 slices.

Harvey ate the most pizza.





# Maths Answers: Lesson 3

## Add 3 or more fractions



1 Complete the additions.

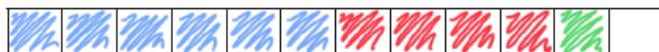
Use the bar models to help you.

a)



$$\frac{1}{2} + \frac{1}{4} + \frac{1}{12} = \frac{5}{6}$$

b)



$$\frac{1}{2} + \frac{1}{3} + \frac{1}{12} = \frac{11}{12}$$

c)



$$\frac{2}{3} + \frac{1}{6} + \frac{1}{12} = \frac{11}{12}$$

d)



$$\frac{1}{3} + \frac{1}{4} + \frac{1}{6} = \frac{3}{4}$$

2 Complete the additions.

$$\text{a) } \frac{1}{5} + \frac{3}{10} + \frac{7}{20} = \frac{17}{20}$$

$$\text{d) } \frac{3}{16} + \frac{1}{2} + \frac{1}{4} = \frac{15}{16}$$

$$\text{b) } \frac{1}{16} + \frac{5}{32} + \frac{3}{8} = \frac{19}{32}$$

$$\text{e) } \frac{1}{2} + \frac{5}{18} + \frac{1}{9} = \frac{8}{9}$$

$$\text{c) } \frac{1}{4} + \frac{5}{24} + \frac{5}{12} = \frac{7}{8}$$

$$\text{f) } \frac{1}{5} + \frac{8}{35} + \frac{2}{7} = \frac{5}{7}$$

Explain how common multiples help when adding the fractions.

3 Rosie has a vegetable patch.

$\frac{2}{9}$  of the patch contains carrots.

$\frac{5}{18}$  of the patch contains potatoes.

$\frac{1}{3}$  of the patch contains onions.



What fraction of the patch contains carrots, potatoes or onions?

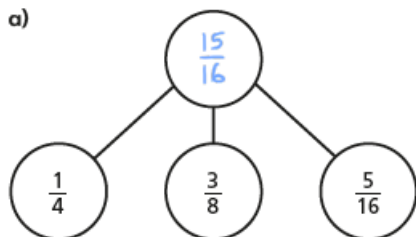
$\frac{5}{6}$  of the patch contains carrots, potatoes or onions.



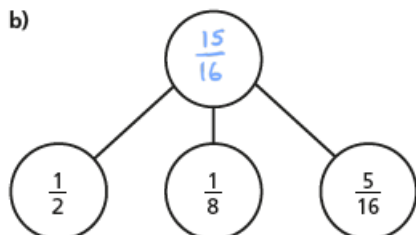


4 Complete the part-whole models.

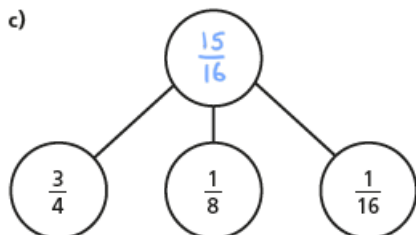
a)



b)



c)



d) Which one of the part-whole models is the odd one out?

Is there more than one answer?

Explain how you know.

Various answers.

5 Fill in the missing numerators.

a)  $\frac{1}{8} + \frac{\boxed{2}}{16} + \frac{3}{8} = \frac{5}{8}$

d)  $\frac{1}{8} + \frac{\boxed{6}}{16} + \frac{1}{4} = \frac{3}{4}$

b)  $\frac{1}{8} + \frac{\boxed{6}}{16} + \frac{3}{8} = \frac{7}{8}$

e)  $\frac{1}{8} + \frac{1}{16} + \frac{\boxed{9}}{16} = \frac{3}{4}$

c)  $\frac{1}{4} + \frac{\boxed{2}}{16} + \frac{3}{8} = \frac{3}{4}$

f)  $\frac{1}{4} + \frac{1}{16} + \frac{\boxed{7}}{16} = \frac{3}{4}$

6 Complete the number square.

The total of each column is  $\frac{4}{5}$

The total of each row is  $\frac{4}{5}$

$\frac{3}{10}$	$\frac{2}{5}$	$\frac{1}{10}$
$\frac{3}{20}$	$\frac{1}{10}$	$\frac{11}{20}$
$\frac{7}{20}$	$\frac{3}{10}$	$\frac{3}{20}$

Create your own problem like this for a partner.




## Red Tasks

### Varied Fluency

1a.  $\frac{5}{6}$

2a.  $\frac{7}{8}$

3a.  $A = \frac{13}{16}$ ;  $B = \frac{15}{16}$

### Reasoning & Problem Solving

1a. Martha is incorrect because she needs to convert the  $\frac{3}{9}$  to  $\frac{6}{18}$ . The answer is  $\frac{17}{18}$ .

2a.  $\frac{3}{10} + \frac{1}{10} + \frac{2}{5} = \frac{8}{10}$

3a. True because  $\frac{9}{14}$  is more than  $\frac{8}{14}$ .

## Gold Tasks

### Varied Fluency

7a.  $\frac{23}{36}$

8a.  $\frac{41}{42}$

9a.  $A = \frac{3}{4}$ ;  $B = \frac{17}{24}$

### Reasoning & Problem Solving

7a. Rita is incorrect because

$$\frac{1}{6} + \frac{1}{3} + \frac{1}{4} + \frac{1}{9} = \frac{31}{36}$$

8a.  $\frac{1}{36} + \frac{3}{9} + \frac{2}{6} = \frac{25}{36}$

9a. True because  $\frac{41}{42}$  is more than  $\frac{40}{42}$ .

## Deepen the moment...

1) Possible answers include the following:

$$\frac{1}{12} + \frac{2}{8} + \frac{4}{12} = \frac{9}{12}$$

$$\frac{1}{6} + \frac{1}{6} + \frac{4}{12} = \frac{8}{12}$$

$$\frac{1}{3} + \frac{1}{6} + \frac{4}{12} = \frac{10}{12}$$

2) There are 19 solutions:

$$\frac{1}{4} + \frac{1}{8} + \frac{1}{16} = \frac{7}{16}$$

$$\frac{1}{4} + \frac{1}{8} + \frac{2}{16} = \frac{8}{16}$$

$$\frac{1}{4} + \frac{1}{8} + \frac{3}{16} = \frac{9}{16}$$

$$\frac{1}{4} + \frac{1}{8} + \frac{4}{16} = \frac{10}{16}$$

$$\frac{1}{4} + \frac{1}{8} + \frac{5}{16} = \frac{11}{16}$$

$$\frac{1}{4} + \frac{1}{8} + \frac{6}{16} = \frac{12}{16}$$

$$\frac{1}{4} + \frac{1}{8} + \frac{7}{16} = \frac{13}{16}$$

$$\frac{1}{4} + \frac{2}{8} + \frac{1}{16} = \frac{9}{16}$$

$$\frac{1}{4} + \frac{2}{8} + \frac{2}{16} = \frac{10}{16}$$

$$\frac{1}{4} + \frac{2}{8} + \frac{3}{16} = \frac{11}{16}$$

$$\frac{1}{4} + \frac{2}{8} + \frac{4}{16} = \frac{12}{16}$$

$$\frac{1}{4} + \frac{2}{8} + \frac{5}{16} = \frac{13}{16}$$

$$\frac{1}{4} + \frac{2}{8} + \frac{6}{16} = \frac{14}{16}$$

$$\frac{1}{4} + \frac{2}{8} + \frac{7}{16} = \frac{15}{16}$$

$$\frac{1}{4} + \frac{3}{8} + \frac{1}{16} = \frac{11}{16}$$

$$\frac{1}{4} + \frac{3}{8} + \frac{2}{16} = \frac{12}{16}$$

$$\frac{1}{4} + \frac{3}{8} + \frac{3}{16} = \frac{13}{16}$$

$$\frac{1}{4} + \frac{3}{8} + \frac{4}{16} = \frac{14}{16}$$

$$\frac{1}{4} + \frac{3}{8} + \frac{5}{16} = \frac{15}{16}$$





# Maths Answers: Lesson 4

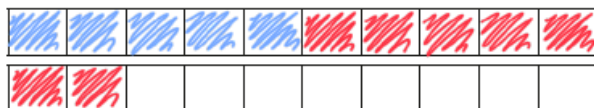
## Add fractions



1 Complete the calculations.

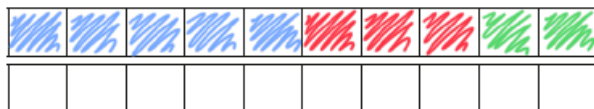
Use the bar models to help you.

a)



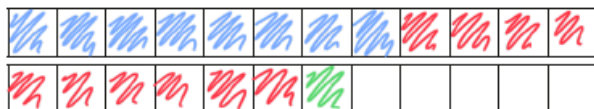
$$\frac{1}{2} + \frac{7}{10} = \frac{12}{10} = 1\frac{1}{5}$$

b)



$$\frac{1}{2} + \frac{3}{10} + \frac{1}{5} = \frac{10}{10} = 1$$

c)



$$\frac{2}{3} + \frac{5}{6} + \frac{1}{12} = \frac{19}{12} = 1\frac{7}{12}$$



2 Complete the additions.

$$\text{a) } \frac{4}{5} + \frac{7}{20} = \frac{23}{20} = 1\frac{3}{20}$$

$$\text{d) } \frac{4}{3} + \frac{5}{12} = \frac{21}{12} = 1\frac{3}{4}$$

$$\text{b) } \frac{5}{4} + \frac{7}{20} = \frac{32}{20} = 1\frac{3}{5}$$

$$\text{e) } \frac{3}{5} + \frac{11}{15} = \frac{20}{15} = 1\frac{1}{3}$$

$$\text{c) } \frac{3}{4} + \frac{5}{12} = \frac{14}{12} = 1\frac{1}{6}$$

$$\text{f) } \frac{5}{3} + \frac{11}{15} = \frac{36}{15} = 2\frac{2}{5}$$

3 Match the additions that have the same answer.

$$\frac{3}{5} + \frac{9}{20}$$

$$\frac{16}{20} + \frac{9}{20}$$

$$\frac{3}{4} + \frac{9}{20}$$

$$\frac{12}{20} + \frac{9}{20}$$

$$\frac{4}{5} + \frac{9}{20}$$

$$\frac{14}{20} + \frac{9}{20}$$

$$\frac{7}{10} + \frac{9}{20}$$

$$\frac{15}{20} + \frac{9}{20}$$





- 4 Dexter has some tins of food. There are four types of food: beans, sweetcorn, soup and tomatoes.

- The total weight of all the tins is 2 kg.
- The tins of beans weigh  $\frac{2}{3}$  kg.
- The tins of sweetcorn weigh  $\frac{5}{12}$  kg.
- The tins of soup weigh  $\frac{1}{4}$  kg.



- a) Work out the total weight of the tins of beans, sweetcorn and soup.

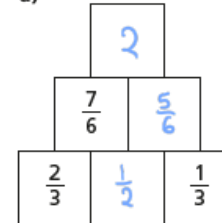
$$1\frac{1}{3} \text{ kg}$$

- b) How much do the tins of tomatoes weigh?

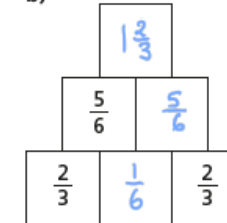
$$\frac{2}{3} \text{ kg}$$

- 5 Complete the addition pyramids.

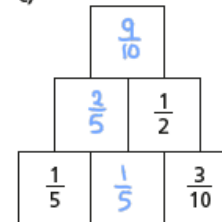
a)



b)



c)



- 6 What could the three missing numerators be?

$$\frac{\boxed{\phantom{00}}}{4} + \frac{\boxed{\phantom{00}}}{12} + \frac{\boxed{\phantom{00}}}{3} = \frac{13}{12}$$

Give three different possibilities.

$$\frac{1}{4} + \frac{6}{12} + \frac{1}{3} = \frac{13}{12}$$

$$\frac{2}{4} + \frac{3}{12} + \frac{1}{3} = \frac{13}{12}$$

$$\frac{1}{4} + \frac{2}{12} + \frac{2}{3} = \frac{13}{12}$$



## Red Tasks

### Varied Fluency

1a.  $\frac{1}{2} + \frac{3}{4} = 1\frac{1}{4}$

2a.  $1\frac{3}{10}$

3a.  $A = 1\frac{13}{20}$ ,  $B = 1\frac{1}{18}$

4a. A is incorrect.  $A = 1\frac{3}{4}$

### Reasoning & Problem Solving

1a. Lee is incorrect.

$$\frac{2}{3} + \frac{5}{6} = 1\frac{3}{6} = 1\frac{1}{2}$$

2a. Various answers, for example:

$$\frac{7}{8} + \frac{1}{4}; \frac{3}{4} + \frac{4}{8}; \frac{7}{8} + \frac{4}{8}$$

3a. Various answers, for example:

$$\frac{3}{4} + \frac{4}{8}; \frac{1}{2} + \frac{3}{4}; \frac{4}{6} + \frac{2}{3}$$

## Gold Tasks

### Varied Fluency

9a.  $\frac{3}{6} + \frac{1}{3} + \frac{6}{8} = 1\frac{7}{12}$

10a.  $1\frac{3}{4}$

11a.  $A = 1\frac{8}{9}$ ,  $B = 1\frac{7}{12}$

12a. B is incorrect.  $B = 1\frac{19}{24}$

### Reasoning & Problem Solving

7a. Anaina is incorrect.

$$\frac{2}{5} + \frac{2}{3} + \frac{5}{6} = 1\frac{9}{10}$$

8a. Various answers, for example:

$$\frac{5}{8} + \frac{2}{3} + \frac{3}{6}; \frac{2}{3} + \frac{3}{6} + \frac{7}{12}; \frac{5}{8} + \frac{2}{3} + \frac{7}{12}$$

9a. Various answers, for example:

$$\frac{1}{2} + \frac{3}{4} + \frac{3}{14}; \frac{1}{2} + \frac{1}{4} + \frac{10}{14}; \frac{1}{2} + \frac{13}{14} + \frac{1}{28}$$

### Deepen the moment...

$$2) \frac{1}{2} + \frac{2}{3} + \frac{4}{6} = 1\frac{5}{6}$$

$$\frac{3}{4} + \frac{1}{3} + \frac{4}{12} = 1\frac{5}{12}$$



## Maths Answers: Lesson 5

question	answer	marks
1	704	1
2	227	1
3	288	1
4	$\frac{9}{11}$	1
5	$\frac{6}{10}$ or $\frac{3}{5}$	1
6	8022	1
7	7868	1
8	54	1
9	73	1
10	2051	1
11	8.42	1
12	0.93	1
13	44	1
14	31 889	1
15	70 500	1
16	534 629	1
17	125	1
18	1200	1
19	8	1
20	6790	1
21	$1\frac{1}{8}$	1

question	answer	marks
22	$\frac{8}{12}$ or $\frac{2}{3}$	1
23	$2\frac{2}{5}$	1
24	5.87	1
25	2856	2
26	394 568	2
27	47	2
28	1203	2
		Total 32

### Deepen the moment...

**Tips:**

Make sure you line up the columns correctly (2 digit and 4 digit numbers).  
Remember the 0 as a place holder.  
Remember to record the amount that you are carrying over.

**Explanation:**

Multiply the top number by 3, start a new line, put a 0 in the units column, multiply the top number by 4. Add the two totals together. Check your answer.



## English Answers:

### Lesson 1

1. Raining/drizzling
2. Bombs
3. To avoid a pile of rubble
4. Paddington at half past 8
5. There were so many of them, they were being pushed along as a group
6. Any answer which suggests an emotion and supports it with relevant information from the text. For example: Upset, because it says in the text, 'He blinked back the tears that had gathered in his eyes and wiped his face before turning towards the station.'

### Lesson 2:

**Your answers will vary so send your work to your teacher for feedback.**

### Lesson 3:

**Send a list of facts that you have found to your teacher.**

### Lesson 4:

**Narrative planning suggestions:**

#### Dilemma

Mother has to make the decision for her two children to be evacuated. Children pack a suitcase with memorable items and head to the station not knowing where they are going or when they are going to see their mother again.



#### Build up

Air raids have started, Father sent to war, mother having to work in a factory and it's no longer safe for the children

#### Events

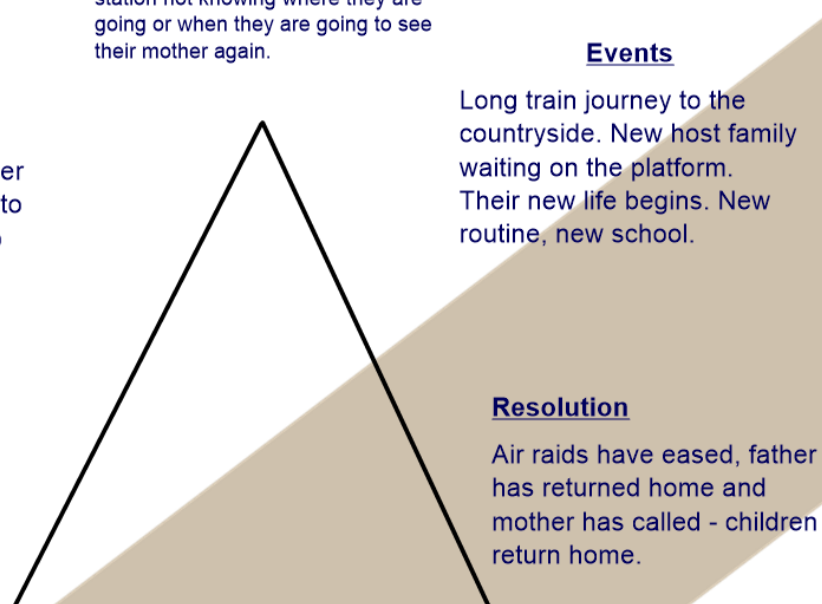
Long train journey to the countryside. New host family waiting on the platform. Their new life begins. New routine, new school.

#### Opening

Family of four - Mother, Father, two children live in London. The year is 1940 (Autumn)

#### Resolution

Air raids have eased, father has returned home and mother has called - children return home.





## Lesson 5:

**Draft your opening and send it to your teacher for feedback.**

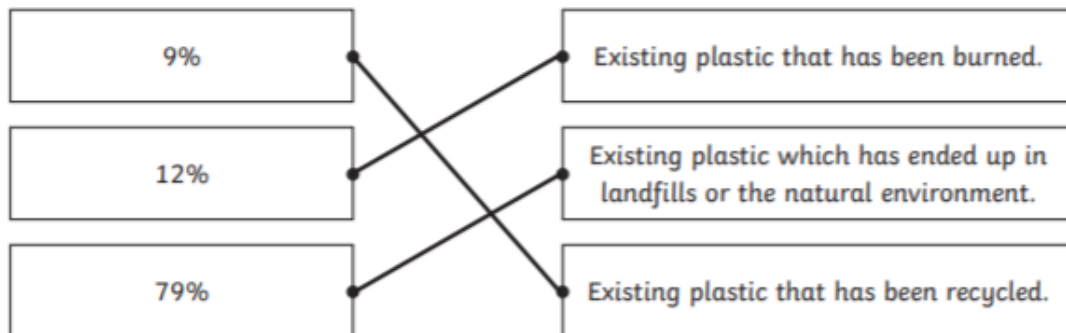
### Reading for Productivity Answers: Geography Lesson 1

#### Answers

1. Which of these is not a way that plastic enters the environment? Tick one.

- ☐ by being blown out of bins
- ☐ by being abandoned by humans
- ☒ **by being dug up from the ground**
- ☐ by being washed down drains

2. Using the infographic to help you, match the percentages to the correct fact.



3. Find and copy **two** examples of items that the text implies will break down over time.

**Accept any two of the following: paper; fruit peels; fabric.**

4. ...and could be endangering the existence of some of our much-loved creatures.

Which word or phrase could the author have used instead of the word **endangering** in this sentence?

**Accept any appropriate synonym, such as: risking; compromising; jeopardising; damaging; putting in danger.**

5. Find and copy one adjective from the section entitled **The Problem with Plastic** that describes the chemicals found in microplastics.

**toxic**

6. Summarise the section entitled **Threats to Wildlife** in 30 words or less.

**Pupils' own responses, such as: Plastic pollution can harm wildlife because creatures may become tangled in waste, eat the plastic by mistake and become poisoned by the chemicals in the plastic.**

7. Which fact from the text did you find most shocking? Give **two** reasons for your answer.

**Pupils' own responses, such as: I found it most shocking that 160,000 plastic bags are used every second because this is a very large number and I did not realise that plastic bags were used on this scale. It also shocks me because it shows how few people use reusable bags.**





## Reading for Productivity Answers: RE Lesson 2

- 1) What will happen to those who have lived good lives and believed in God? *They will have a place in heaven?*
- 2) Where will the Son of Man sit? *On his glorious throne.*
- 3) Which of these is closest in meaning to the **eternal fire**?  
Heaven      *Hell*      Earth      Jerusalem
- 4) According to the text, what are goats like? *They are stubborn and resist being told what to do.*
- 5) What do you think is meant by 'The kingdom prepared for you since the creation of the world.'  
*The kingdom of Heaven.*
- 6) Answer these true or false questions.
  - a) The sheep are put on the right and the goats on the left. *T*
  - b) The sheep will go to Hell. *F*
  - c) The Goats are the ones that helped others in their lives. *F*
  - d) In the story, it is better to be a sheep than a goat. *T*

## Reading for Productivity Answers: DT Lesson 3

- 1) Why did cooks become so creative? *They had 14 years to get creative*
- 2) Name two things that became crucial for storage    *pickling and preserving*
- 3) Define the word foraging    *searching / hunting / looking*
- 4) How much food is wasted in the UK alone? *25% of all food bought*
- 5) What does frugality mean? *To be economical / to be thrifty*
- 6) Find and copy a word which means 'to add'    *supplement*



## Reading for Productivity Answers: Science Lesson 4

1) What is water resistance?

Water resistance is a type of force that uses friction to slow things down that are moving through water.

2) What happens if an object in water has a larger area?

If an object has a larger area, it will collide more with water particles and therefore have a bigger drag force.

3) Name three factors that affect water resistance.

Any three; Shape/streamlined, Velocity, texture and density.

4) Write a definition of the word density.

Density is how much matter is packed into a substance, how tightly packed the particles are.

5) Which of the following words/phrases also means submerged?

High      on top      **Under**      Far away

6) Why do penguins find it easy to swim through the water?

Penguins are able to glide through the water with little water resistance because they are slim and have bullet-shaped bodies.

## Reading for Productivity Answers: Computing Lesson 5

1. 1955-2011
2. For his time as chairman and co-founder of Apple.
3. A pioneer of the computer revolution of the 1970s and 1980s.
4. In 1974 / Seeking enlightenment and studying Buddhism.
5. A long power struggle with the company's board.
6. NeXT and Pixar.
7. The iMac, iTunes, the iPod, the iPhone and the iPad.
8. A pancreatic neuroendocrine tumour. He died on 5<sup>th</sup> October 2011.