






## Challenge questions – Fluency


9a. Write a fraction shown by each image.


A.  B. 

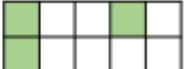
C.  D. 

10a. Match the fraction to the correct representation. Which fraction is left?

$\frac{3}{10}$  A. 

$\frac{5}{7}$  B. 

$\frac{3}{9}$  C. 


$\frac{5}{11}$  D. 

11a. Place the following fractions on the number line below.

$\frac{11}{12}$   $\frac{6}{12}$   $\frac{1}{12}$   $\frac{4}{12}$

0 1

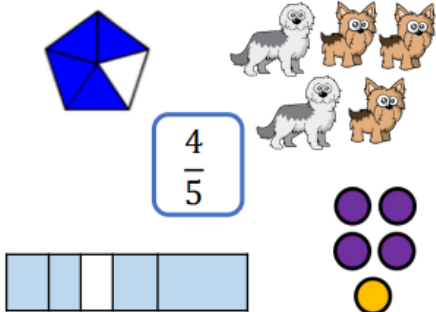
12a. Write the two fractions that are represented below.



## Challenge questions – problem solving

### Application questions

Which representations of  $\frac{4}{5}$  are incorrect?



Explain how you know.

### Always, Sometimes, Never?



Alex says,

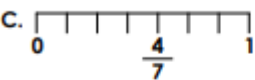

If I split a shape into 4 parts, I have split it into quarters.



Explain your answer.

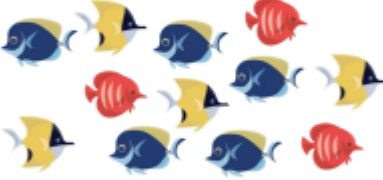
7a. Which image is the odd one out?

A.  B. 

C.  D. 

Redraw the image to show the correct fraction and create one of your own.

8a. Amy thinks one of the fractions represented below is  $\frac{3}{12}$ .



Is she correct? Prove it.

9a. Sam writes a fraction on the number line.

0  $\frac{6}{8}$  1

Explain the mistake he has made.

## Answers – Fluency

9a. A:  $\frac{4}{10}$  or  $\frac{6}{10}$ ; B:  $\frac{1}{6}$  or  $\frac{5}{6}$ ; C:  $\frac{3}{12}$  or  $\frac{9}{12}$ ; D:  $\frac{2}{12}$  or  $\frac{10}{12}$

10a. A:  $\frac{5}{7}$ ; B:  $\frac{3}{9}$ ; C:  $\frac{3}{10}$ ; D:  $\frac{3}{10}$   
 $\frac{5}{11}$  is the remaining fraction.



12a.  $\frac{4}{10}$  and  $\frac{6}{10}$

## Problem solving

7a. B is the odd one out. Accept two representations of  $\frac{4}{7}$ .

8a. Amy is correct because there are 12 fish in total. The fractions of fish are  $\frac{3}{12}$ ,  $\frac{4}{12}$  and  $\frac{5}{12}$ .

9a. Sam is incorrect because he has placed the fraction half way along the line, which would be  $\frac{4}{8}$ .

## Always, Sometimes, Never?

Alex says,

If I split a shape into 4 parts, I have split it into quarters.



Explain your answer.

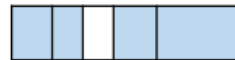
Sometimes

If the shape is not split equally, it will not be in quarters.

Which representations of  $\frac{4}{5}$  are incorrect?



$\frac{4}{5}$



Explain how you know.

The image of the dogs could represent  $\frac{2}{5}$  or  $\frac{3}{5}$



The bar model is not divided into equal parts so this does not represent  $\frac{4}{5}$

