Reasoning and Problem Solving
Step 8: Unit Fractions

National Curriculum Objectives:

Mathematics Year 2: (2F1a) Recognise, find, name and write fractions 1/3 , 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity
Mathematics Year 2: (2F1b) Write simple fractions for example, 1/2 of 6 = 3

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Use a given fraction to calculate the whole. Using shapes in sorting hoops.
Expected Using a given fraction, calculate the whole. Use that information to calculate a different fraction using the same whole. Using objects where all objects are arranged in arrays.
Greater Depth Using a given fraction, calculate the whole. Use that information to calculate a different fraction using the same whole. Using objects where all objects are arranged randomly.

Questions 2, 5 and 8 (Problem Solving)
Developing Find the odd one out. Using shapes only, including circles, rectangles and quadrilaterals.
Expected Find the odd one out. Using shapes includes circles, triangles, quadrilaterals and polygons. Some use of objects where all objects are arranged in arrays.
Greater Depth Find the odd one out. Using shapes including circles, triangles, quadrilaterals and polygons, and objects where all objects are arranged at random.

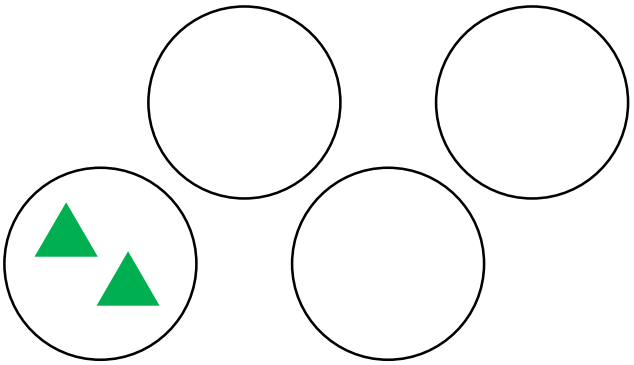
Questions 3, 6 and 9 (Reasoning)
Developing Prove whether a statement about fractions is true or false. Using shapes with dividing lines.
Expected Prove whether a statement about fractions is true or false. Using objects where all objects are arranged in arrays.
Greater Depth Prove whether a statement about fractions is true or false. Using objects where all objects are arranged at random.

More Year 2 Fractions resources.

Did you like this resource? Don't forget to review it on our website.

Unit Fractions

1a. Here is $\frac{1}{4}$ of a total.



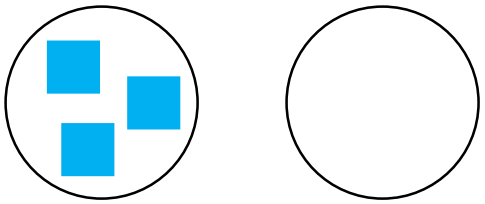
What is the total number of triangles?

D

PS

Unit Fractions

1b. Here is $\frac{1}{2}$ of a total.

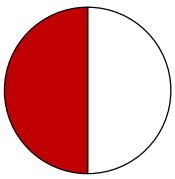


What is the total number of squares?

D

PS

2a. Find the odd one out.

A. 

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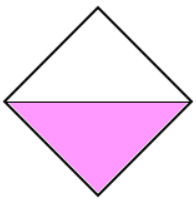
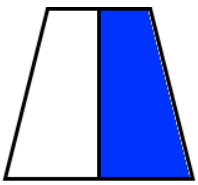
C. 

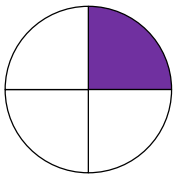
D. 

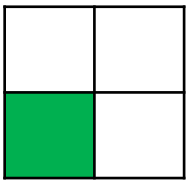
D

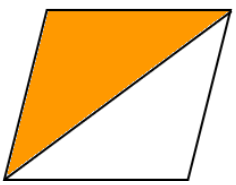
PS

2b. Find the odd one out.

A. 

B. 

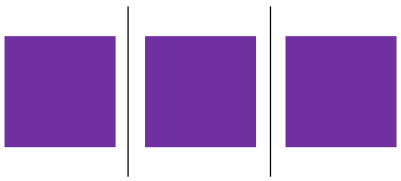
C. 

D. 

D

PS

3a. Ed is finding one third of the objects below.



$\frac{1}{3}$ of the squares is 2 squares.

Is Ed correct? Prove it.

D

R

3b. Raya is finding one half of the objects below.

$\frac{1}{2}$ of the circles is 2 circles.

Is Raya correct? Prove it.

D

R

Unit Fractions

4a. Here is $\frac{1}{3}$ of a total.

What is the total number of watches?

How many watches are there in $\frac{1}{2}$ of the total?

E PS

Unit Fractions

4b. Here is $\frac{1}{2}$ of a total.

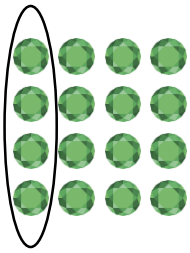
What is the total number of pens?

How many pens are there in $\frac{1}{4}$ of the total?

E PS

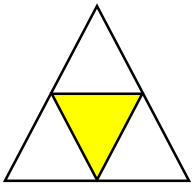
5a. Find the odd one out.

A.

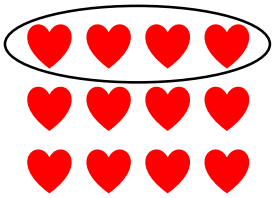


B.

C.



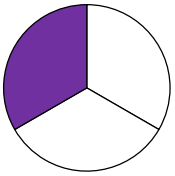
D.



E PS

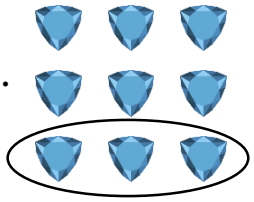
5b. Find the odd one out.

A.

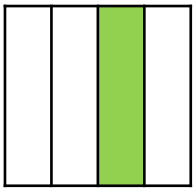


B.

C.

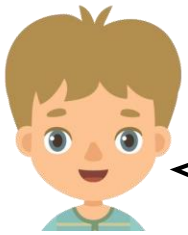


D.



E PS

6a. Hugo is finding one third of the objects below.

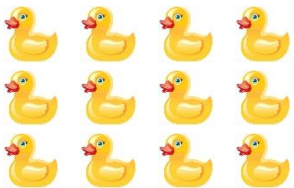


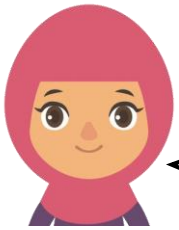
$\frac{1}{3}$ of the boxes is 2 boxes.

Is Hugo correct? Prove it.

E R

6b. Tina is finding one quarter of the objects below.





$\frac{1}{4}$ of the ducks is 4 ducks.

Is Tina correct? Prove it.

E R

Unit Fractions

7a. Here is $\frac{1}{4}$ of a total.

What is the total number of footballs?

How many footballs are there in $\frac{1}{3}$ of the total?

GD PS

Unit Fractions

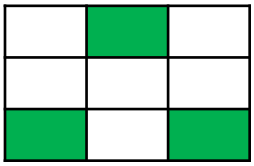
7b. Here is $\frac{1}{3}$ of a total.

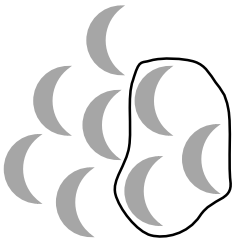
What is the total number of shells?

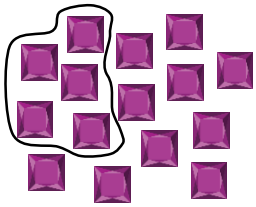
How many shells are there in $\frac{1}{2}$ of the total?

GD PS

8a. Find the odd one out.

A. 

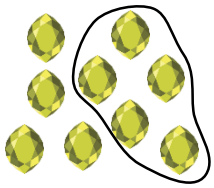
B. 

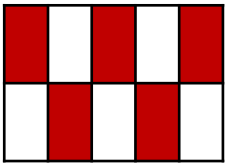
C. 

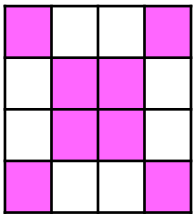
D. 

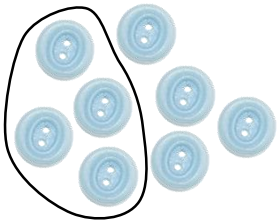
GD PS

8b. Find the odd one out.

A. 

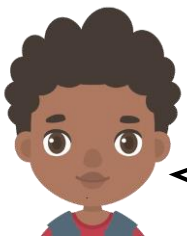
B. 

C. 

D. 

GD PS

9a. Jarrett is finding one third of the objects below.

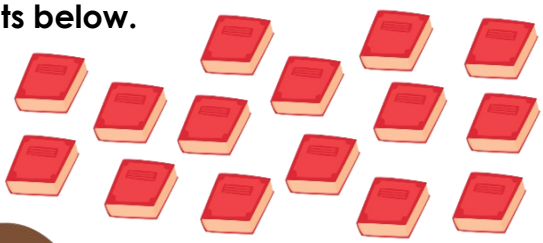


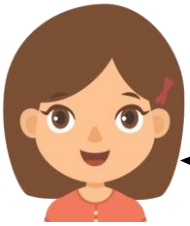
$\frac{1}{3}$ of the marbles is 6 marbles.

Is Jarrett correct? Prove it.

GD R

9b. Tanya is finding one quarter of the objects below.





$\frac{1}{4}$ of the books is 5 books.

Is Tanya correct? Prove it.

GD R

Reasoning and Problem Solving
Unit Fractions

Developing

1a. 8

2a. B

3a. Ed is incorrect because one third of 3 is 1.

Expected

4a. 6 and 3

5a. D

6a. Hugo is correct because one third of 6 is 2.

Greater Depth

7a. 12 and 4

8a. B

9a. Jarrett is correct because one third of 18 is 6.

Reasoning and Problem Solving
Unit Fractions

Developing

1b. 6

2b. D

3b. Raya is correct because one half of 4 is 2.

Expected

4b. 8 and 2

5b. D

6b. Tina is incorrect because one quarter of 12 is 3.

Greater Depth

7b. 18 and 9

8b. A

9b. Tanya is incorrect because one quarter of 15 cannot be found. 5 books is one third of the total number of books.