Homework/Extension
Step 10: Equivalence of Half and Two Quarters

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 : (2F2) Recognise the equivalence of 2/4 and 1/2

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Circle half and two quarters of a group of objects and complete a sentence. Using only images.
Expected Circle half and two quarters of a group of objects and complete a sentence. Using images and text.
Greater Depth Circle half and two quarters of a group of objects and complete a sentence. Using images arranged at random.

Questions 2, 5 and 8 (Varied Fluency)
Developing Use <, > or = to complete a sentence using only images for support.
Expected Use <, > or = to complete a sentence using some images and some text for support.
Greater Depth Use <, > or = to complete a sentence using number lines for support.

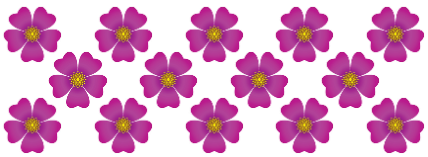
Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Identify and explain a mistake when finding half and two quarters of a group of objects. Scaffolding provided.
Expected Identify and explain a mistake when finding half and two quarters of a group of objects using images for support.
Greater Depth Identify and explain whether a method is the most efficient when finding half and two quarters of a group of objects. Using images arranged at random.

More Year 2 Fractions resources.

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

Equivalence of Half and Two Quarters

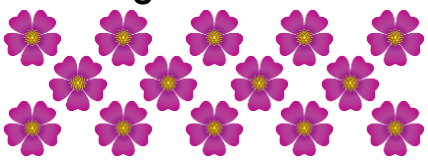
1. Circle $\frac{1}{2}$ of the images below and complete the statements.



$\frac{1}{2}$ of 14 = ☐

$\frac{1}{2}$ of 16 = ☐

Circle $\frac{2}{4}$ of the images below and complete the statements.



$\frac{2}{4}$ of 14 = ☐

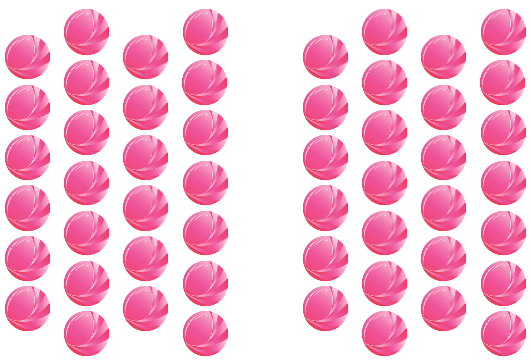
$\frac{2}{4}$ of 16 = ☐

D

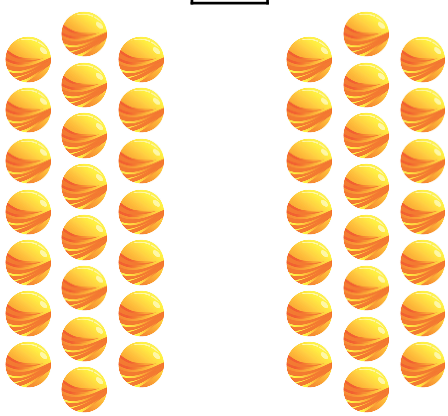
VF
HW/Ext

2. Use <, > or = to finish the statements below. Prove it using the images below.

A. $\frac{1}{2}$ of 26 ☐ $\frac{2}{4}$ of 26



B. $\frac{1}{2}$ of 22 ☐ $\frac{2}{4}$ of 22



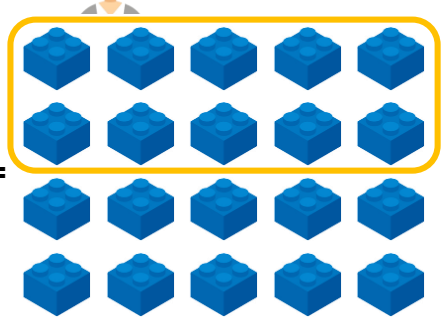
D

VF
HW/Ext

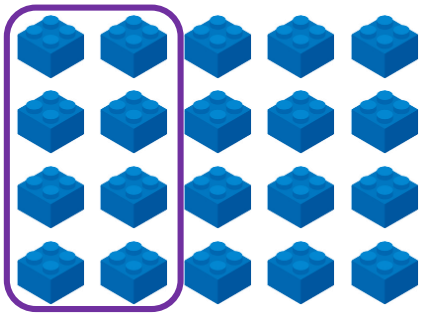
3. Ben is finding one half and two quarters by grouping the bricks below.
He says,

Half of the bricks is 10. Two quarters of the bricks is 8.

one half =



two quarters =



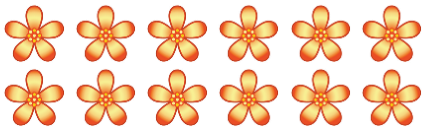
Find and explain the mistake that Ben has made.

D

RPS
HW/Ext

Equivalence of Half and Two Quarters

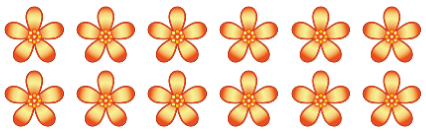
4. Circle $\frac{1}{2}$ of the images below and complete the statements.



$\frac{1}{2}$ of ☐ = ☐

$\frac{1}{2}$ of ☐ = ☐

Circle $\frac{2}{4}$ of the images below and complete the statements.



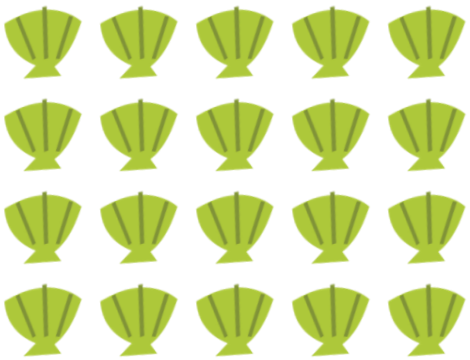
$\frac{2}{4}$ of ☐ = ☐

$\frac{2}{4}$ of ☐ = ☐

VF
HW/Ext

5. Use <, > or = to finish the statements below. Prove it using the images below.

A. $\frac{2}{4}$ of ☐ ☐ $\frac{1}{2}$ of ☐

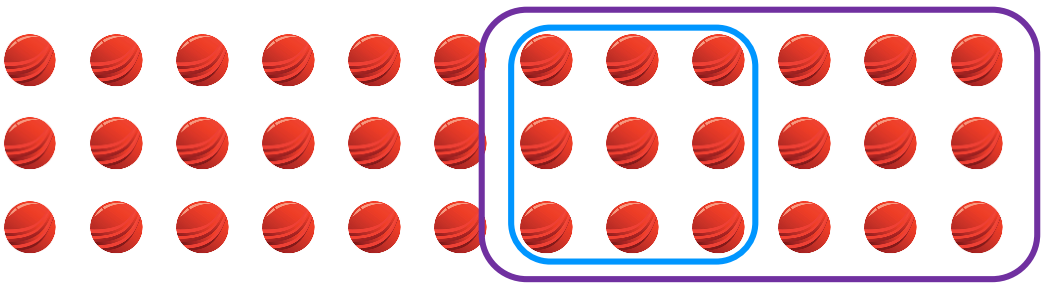


B. $\frac{2}{4}$ of ☐ ☐ $\frac{1}{2}$ of ☐

VF
HW/Ext

6. Annie is finding one half and two quarters by grouping the marbles below.
She says,

One half of the marbles is 9. Two quarters of the marbles is 18.



Find and explain the mistake that Annie has made.

RPS
HW/Ext

Equivalence of Half and Two Quarters

4. Find $\frac{1}{2}$ and $\frac{2}{4}$ of the images below and complete the statements.

$\frac{1}{2}$ of ☐ = ☐ $\frac{2}{4}$ of ☐ = ☐

Find $\frac{1}{2}$ and $\frac{2}{4}$ of the images below and complete the statements.

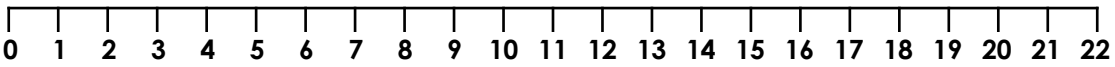
$\frac{2}{4}$ of ☐ = ☐ $\frac{1}{2}$ of ☐ = ☐

GD

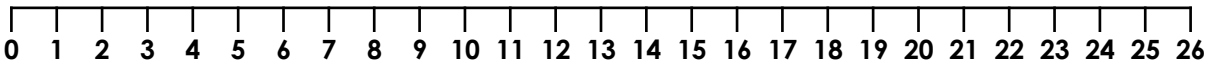
VF
HW/Ext

5. Use <, > or = to finish the statements below. Prove it using the images below.

A. $\frac{2}{4}$ of 22 ☐ $\frac{1}{2}$ of ☐



B. $\frac{2}{4}$ of 26 ☐ $\frac{1}{2}$ of ☐



GD

VF
HW/Ext

6. Chris is finding one half and two quarters by grouping the toys below.
He says,

To find two quarters I have to find half of the toys, then half that number and multiply the answer by 2.

Is this the most efficient way to find two quarters? Explain your answer.

GD

RPS
HW/Ext

Homework/Extension
Equivalence of Half and Two Quarters

Developing

1. $\frac{1}{2}$ of 14 = 7; $\frac{1}{2}$ of 16 = 8; $\frac{2}{4}$ of 14 = 7; $\frac{2}{4}$ of 16 = 8
2. A = $\frac{1}{2}$ of 26 = $\frac{2}{4}$ of 26; B = $\frac{1}{2}$ of 22 = $\frac{2}{4}$ of 22
3. Ben has correctly found half of the bricks but has incorrectly circled two quarters. He has circled two columns of bricks but he should have circled two rows.

Expected

4. $\frac{1}{2}$ of 12 = 6; $\frac{1}{2}$ of 18 = 9; $\frac{2}{4}$ of 12 = 6; $\frac{2}{4}$ of 18 = 9
5. A = $\frac{2}{4}$ of 20 = $\frac{1}{2}$ of 20; B = $\frac{2}{4}$ of 24 = $\frac{1}{2}$ of 24
6. Annie has found two quarters of the marbles correctly because there are 36 in total. She has then found half of the two quarters and not the whole amount. Half is also 18 not 9.

Greater Depth

7. A = $\frac{1}{2}$ of 24 = 12; $\frac{2}{4}$ of 24 = 12; B = $\frac{1}{2}$ of 30 = 15; $\frac{2}{4}$ of 30 = 15
8. A = $\frac{2}{4}$ of 22 = $\frac{1}{2}$ of 22; B = $\frac{2}{4}$ of 26 = $\frac{1}{2}$ of 26
9. Chris has found a method that will get the right answer but it is not efficient. As half and two quarters are equivalent, once he has halved the toys he already has the answer for half. He does not need to half this and multiply by 2.