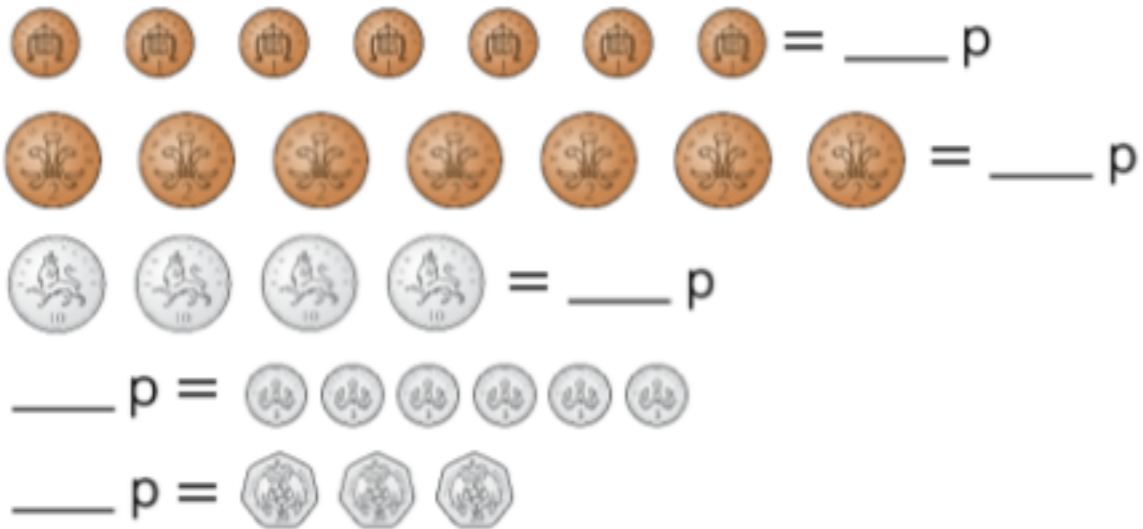# Skill - I can find three quarters.

Spring 2
Week 6- Lesson 1

Rapid Recall

Count the money:

Make 50 p three ways using the coins below.

You can use the coins more than once.

Big Question

I am thinking of a number.

?

One third of my number is 12

Which will be greater, one half of my number or one quarter of my number?

Use cubes or a bar model to prove your answer.

The whole number is 36

One half is 18
One quarter is 9

One half of the number will be greater.

Varied Fluency
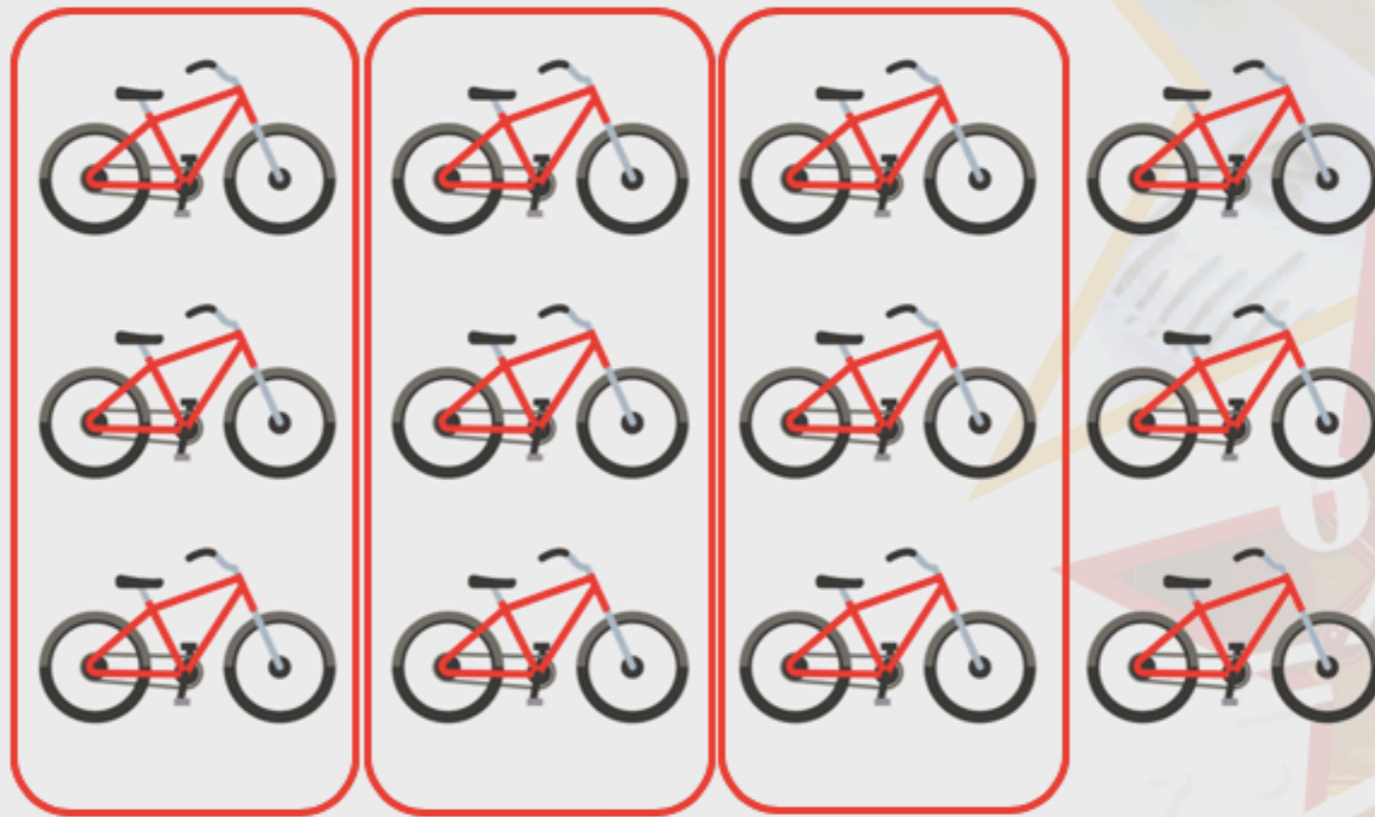
Varied Fluency

Varied Fluency

Varied Fluency

Tick the statement which is correct.

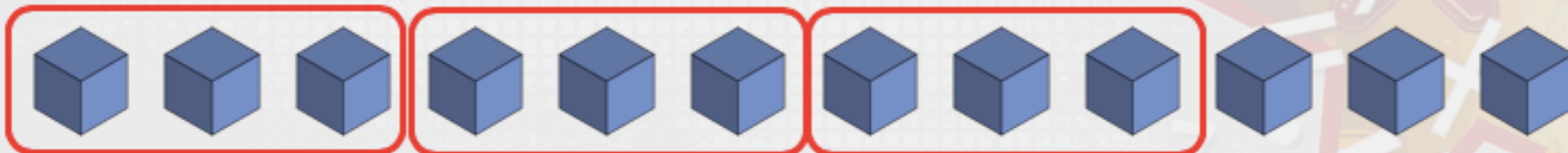$\frac{3}{4}$ of 12 is 3 ☐

$\frac{3}{4}$ of 12 is 9 ☐

Varied Fluency
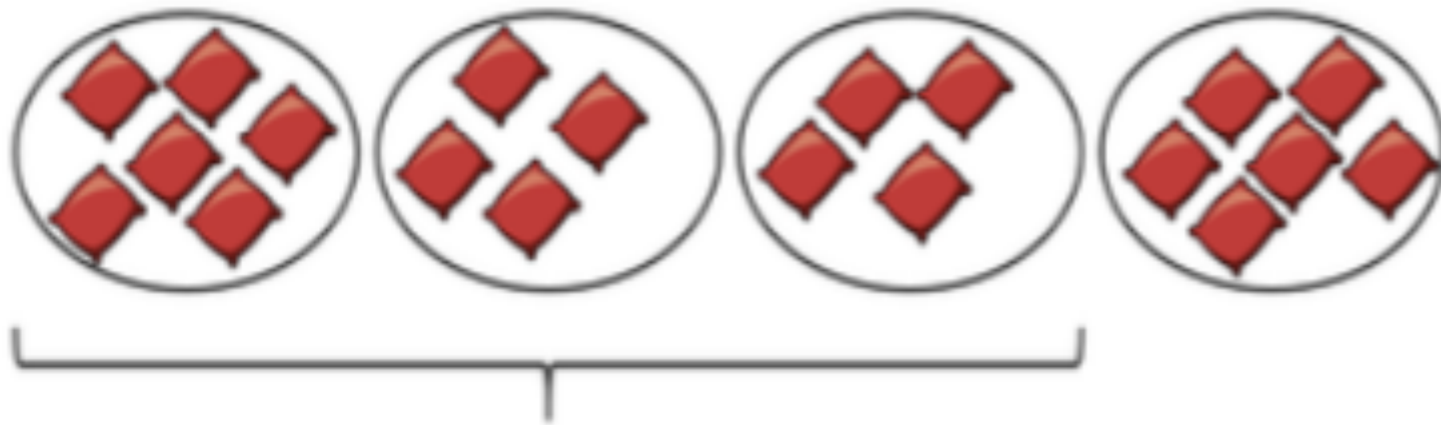
Problem Solving

Amir is using beanbags and hoops to find three quarters of 20

Can you spot his mistake?

$$\frac{3}{4} \text{ of } 20 = 14$$

Amir hasn't created equal groups. 20 should be shared into 4 equal parts. There should be 5 beanbags in each hoop so three quarters of 20 is 15 not 14

Problem Solving

6b. Solve the word problem below.

Molly is thinking of a number.

One quarter of her number is shown below.

What is Molly's number?

Reasoning

Oliver is baking cupcakes.

$\frac{1}{4}$ of them are shown below.

Circle the number of cupcakes that Oliver bakes altogether.

| 10 | 20 | 15 |

How do you know?

Reasoning

Oliver is baking cupcakes.

$\frac{1}{4}$ of them are shown below.

Circle the number of cupcakes that Oliver bakes altogether.

| 10 | 20 | 15 |

How do you know?
20 cupcakes in total. One quarter is 5 and three quarters is 5 + 5 + 5 = 15. 5 + 15 = 20

Reasoning

5b. Adam collects dinosaurs.

$\frac{1}{4}$ of them are shown below.

Circle the number of dinosaurs that Adam collects altogether.

9   12   10

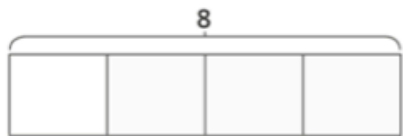How do you know?

Independent Activity

1. Work out $\frac{3}{4}$ of £20

2. The bar model is split into 4 equal parts.

a) What is the value of each part?
   Label it on the bar model.

8			

b) Use the bar model to find $\frac{3}{4}$ of 8 [ ]

3. Year 2 are planting sunflower seeds.
Annie has 4 pots and 12 seeds.
She plants the same number of seeds in each pot.

a) Draw the seeds she puts in each pot.

◯ ◯ ◯ ◯

b) Complete the number sentences.

$\frac{1}{4}$ of 12 = [ ] $\frac{3}{4}$ of 12 = [ ]

4. Eva eats three-quarters of her sweets.
She eats these sweets.

How many sweets does Eva have left?

4a. Sam says,

$\frac{3}{4}$ of 16 is 10.

Is Sam correct? Prove it.

5a. Isra collects some shells.

$\frac{1}{4}$ of them are shown below.

Circle the number of shells that Isra collects altogether.

[20]   [12]   [15]
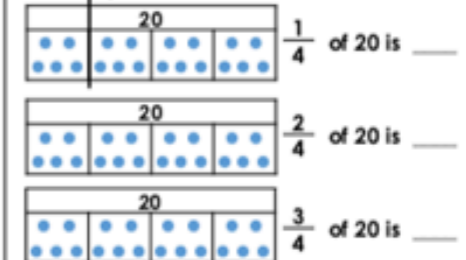
How do you know?

6a. Solve the word problem below.

Azzam is thinking of a number.

One quarter of his number is shown below.

What is Azzam's number?

3b. Complete the statements.

20
$\frac{1}{4}$ of 20 is ____

20
$\frac{2}{4}$ of 20 is ____

20
$\frac{3}{4}$ of 20 is ____

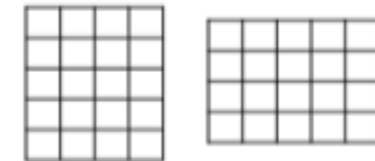4b. Tick the statement which is correct.

A. $\frac{3}{4}$ of 16 is 12 [ ]

B. $\frac{3}{4}$ of 16 is 8 [ ]

10b. Shade the shapes to show $\frac{3}{4}$ of the total.

11b. Complete the statements.

$\frac{1}{4}$ of 24 is ____

$\frac{2}{4}$ of 24 is ____

$\frac{3}{4}$ of 24 is ____

Skill - I can count in fractions.

Spring 2
Week 6- Lesson 2

Rapid Recall

2 minutes to write down as many bonds to 60 as possible.

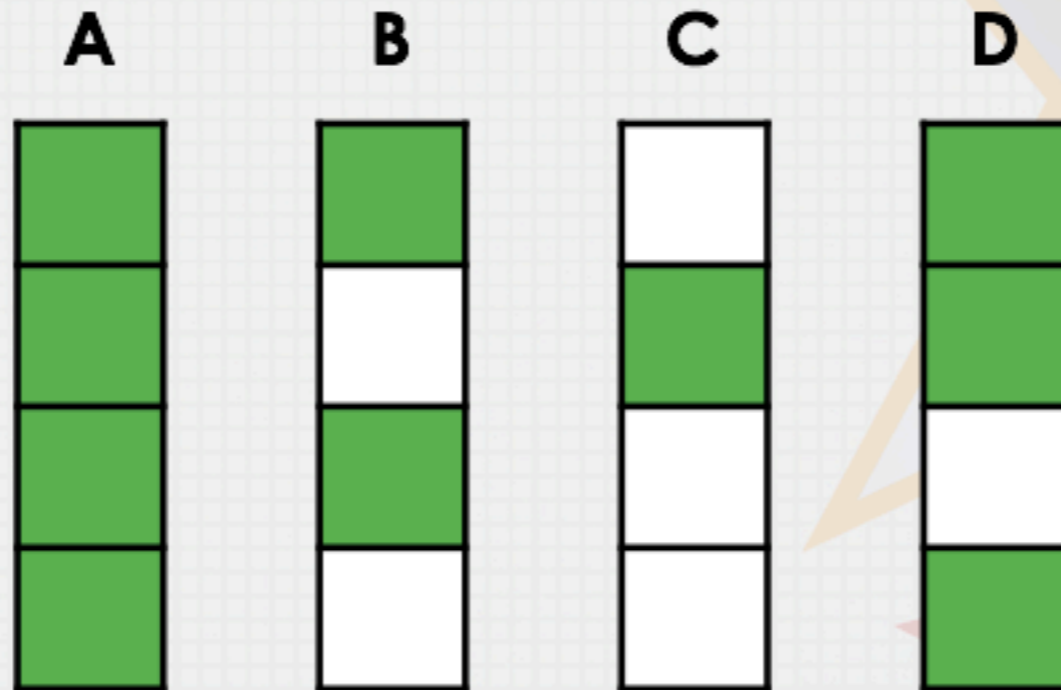# Big Question

Ron is thinking of a number.

One third of his number is greater than 8 but smaller than 12.
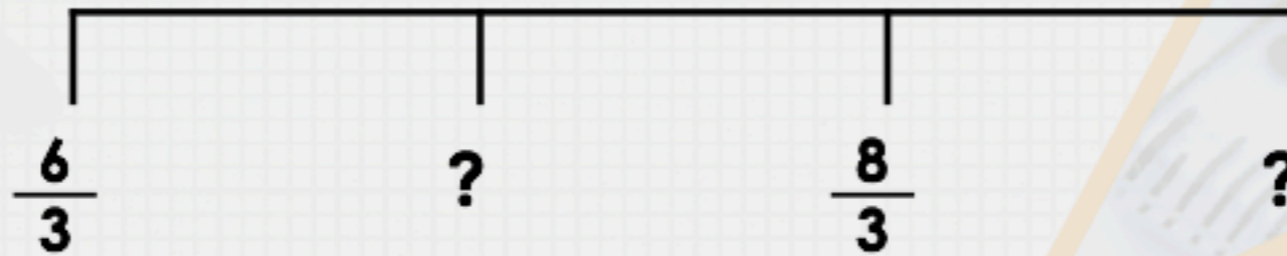
What could his number be?

Varied Fluency

Put these fractions in order from smallest to largest.

A   B   C   D

Ask the children to write the fraction for each letter - this will also help when putting them in order.

Varied Fluency

Which fractions complete the sequence?

$$\frac{6}{3} \qquad ? \qquad \frac{8}{3} \qquad ?$$

A   Seven thirds and ten thirds

B   Seven thirds and nine thirds

Varied Fluency

What is happening in this sequence?

$$\frac{2}{3} \qquad \frac{3}{3} \qquad \frac{4}{3}$$

Increasing by a third each time.

Problem solving

Look at this pattern.

What would come next?
Write the next fraction and draw the representation.

What would be the 8th fraction in the pattern?

Five thirds, $\frac{5}{3}$
Children may think that the later models are in sixths, it is important to stress that the whole one is still made up of three and so we are still counting in thirds.

The 8th fraction would be $\frac{8}{3}$ or $2\frac{2}{3}$

Problem Solving

Sam and his three friends each read half of a book.

How many full books will they read altogether?

2 books

Reasoning

Iona is trying to complete the number line.

$\frac{6}{3}$ $\frac{4}{3}$?

I think the missing fraction is $\frac{2}{3}$.

Is she correct? Prove it.

She is incorrect because she is counting backwards one third at a time. The correct answer is $\frac{3}{3}$.

Reasoning

Alex and Whitney are counting in quarters.

One quarter, two quarters, three quarters, four quarters...

Alex

One quarter, one half, three quarters, one whole...

Whitney

Who is correct? Explain your answer.

Remind the children to think back to equivalent fractions!

Reasoning

Alex and Whitney are counting in quarters.

Alex: One quarter, two quarters, three quarters, four quarters…

Whitney: One quarter, one half, three quarters, one whole…

Who is correct? Explain your answer.

They are both correct. Two quarters is equivalent to one half and four quarters is equivalent to one whole.

Independent Activity

Consolidation of the whole fraction topic.

Spring 2
Week 6- Lesson 3

Rapid Recall

Complete this table:

	What is the name of this shape?	How many sides does it have?
▢		
⬠ (yellow pentagon)		
▲ (green triangle)		
▬ (blue rectangle)		
⬡ (hexagon)		

Big Question

Whitney says:

I have shaded a third of my shape.

Do you agree?
Explain why.

Why do you think Whitney thinks this?

Whitney has shaded half or 2 quarters of her shape.

She thinks that she has shaded one third because one part out of three is shaded, but the parts are not equal.

Varied Fluency

How many equal groups are the marbles split into?

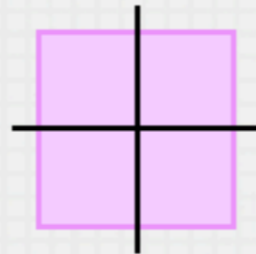# Varied Fluency

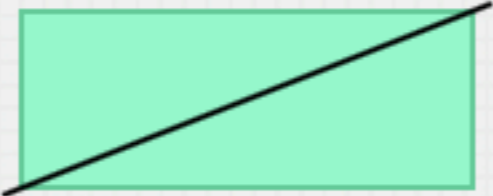Are the shapes split into equal or unequal parts?

		Equal	Unequal
A.		☐	☐
B.		☐	☐
C.		☐	☐

Varied Fluency

Varied Fluency

Match the fractions with their names.

$\frac{1}{2}$

One half

$\frac{1}{3}$

One quarter

$\frac{1}{4}$

One third

Varied Fluency

Fill in the blanks. Use counters to help you if needed.

$\frac{1}{2}$ of 4 = ☐ $\frac{1}{2}$ of 40 = ☐

$\frac{1}{2}$ of 6 = ☐ $\frac{1}{2}$ of 60 = ☐

$\frac{1}{2}$ of 8 = ☐ $\frac{1}{2}$ of 80 = ☐

Varied Fluency

Complete the bar model.

16
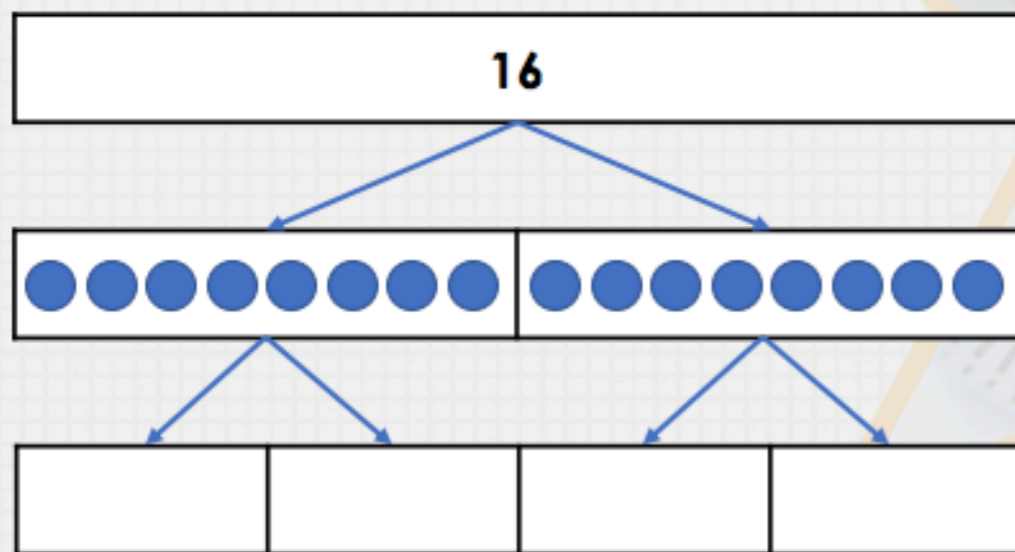
$\frac{1}{2}$ of 16 is ☐

$\frac{1}{4}$ of 16 is ☐

Complete the bar model.

16
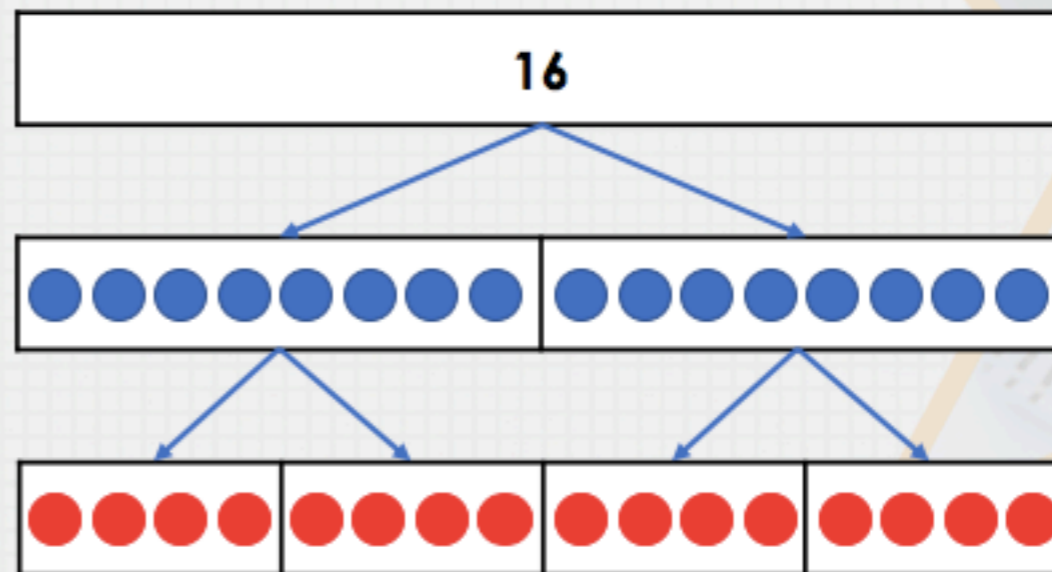
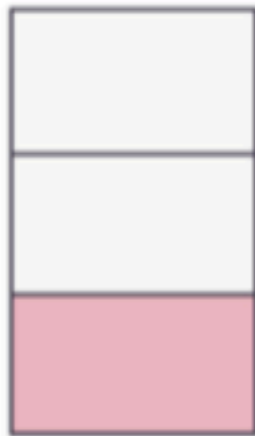$\frac{1}{2}$ of 16 is **8**

$\frac{1}{4}$ of 16 is **4**

Varied Fluency

1. Match each image to a fraction to find the odd one out.

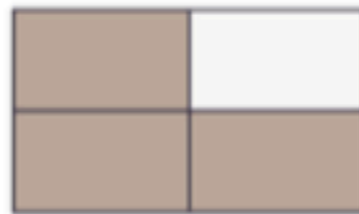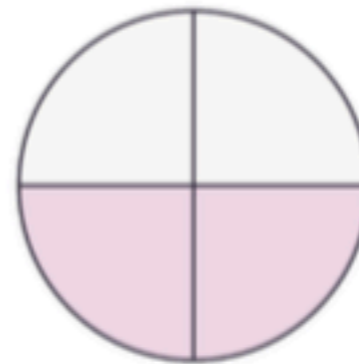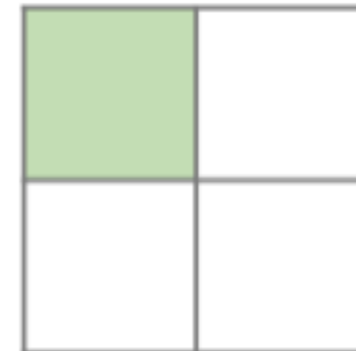A   B   C   D   E

$\frac{1}{4}$ $\frac{3}{4}$ $\frac{1}{3}$ $\frac{2}{3}$ $\frac{4}{4}$ $\frac{2}{4}$

Varied Fluency

9a. True or false? The fraction indicated by the arrow will be $\frac{6}{4}$.

Varied Fluency

Fill in the blanks.

$\frac{1}{4}$ of 4 is → 4 ÷ 2 = ☐ ÷ 2 → ☐

$\frac{1}{4}$ of 20 is → 20 ÷ 2 = ☐ ÷ 2 → ☐

$\frac{1}{4}$ of 40 is → 40 ÷ 2 = ☐ ÷ 2 → ☐

Varied Fluency

Fill in the blanks.

$\frac{1}{4}$ of 4 is	→	$4 \div 2 =$ **2** $\div 2$	→	**1**
$\frac{1}{4}$ of 20 is	→	$20 \div 2 =$ **10** $\div 2$	→	**5**
$\frac{1}{4}$ of 40 is	→	$40 \div 2 =$ **20** $\div 2$	→	**10**

Varied Fluency

6a. Shade the shape to show $\frac{3}{4}$ of 20.
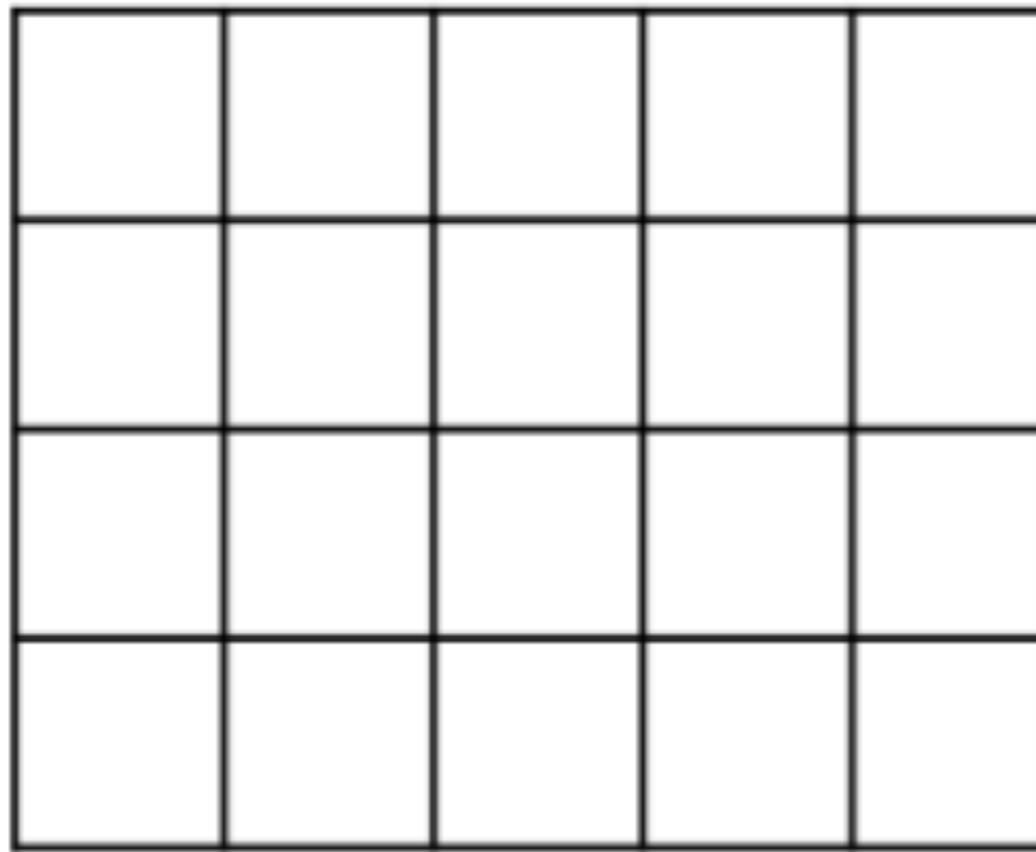
Consolidation of the whole fraction topic.

Spring 2
Week 6- Lesson 4

Rapid Recall

2 Times table
https://www.youtube.com/watch?v=6RHvlUry_uc

3 Times table
https://www.youtube.com/watch?v=70aG99v704k

Big Question

Annie has a piece of ribbon.

She cuts it into three equal parts.

One third of the ribbon is 6 cm long.

How long would half the ribbon be?

Half the ribbon would be 9cm.
$(6 \times 3 = 18$cm
Half of $18 = 9$cm$)$

A bar model would be a particularly useful pictorial representation of this question.

Problem Solving

Here are some cubes.

Whitney takes $\frac{1}{2}$ of the cubes.

How many cubes does Whitney take?

4 cubes

Ron takes $\frac{1}{4}$ of the cubes.

How many cubes does Ron take?

2 cubes

Problem Solving

I am thinking of a number.
Half of my number is more than 10 but less than 15.
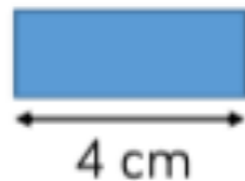What could my number be?

Problem Solving

Mo has two ribbons. He cuts $\frac{1}{4}$ from each ribbon.

5 cm

$\frac{1}{4}$ of ribbon A

$\frac{1}{4}$ of ribbon B

4 cm

How long were Mo's whole pieces of ribbon?

Which ribbon was the longest? How much longer?

The children have seen this question before. Once they have worked it out challenge them with another one using different lengths.

Problem Solving

Tommy has a jar of 12 cookies. He gives half of them to Alex, and $\frac{2}{4}$ of them to Mo.

Who gets the most cookies?

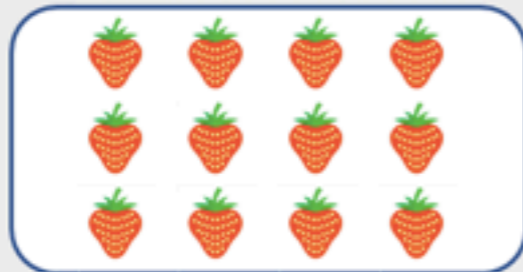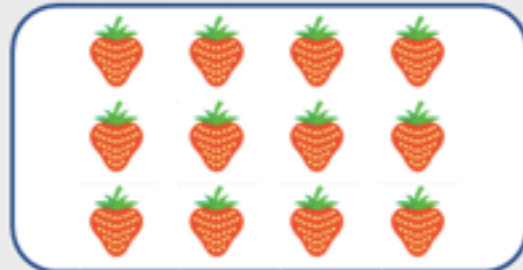They both get the same amount. They will each get 6 cookies.

Problem Solving

Using the images to help, match the fractions to their answers.

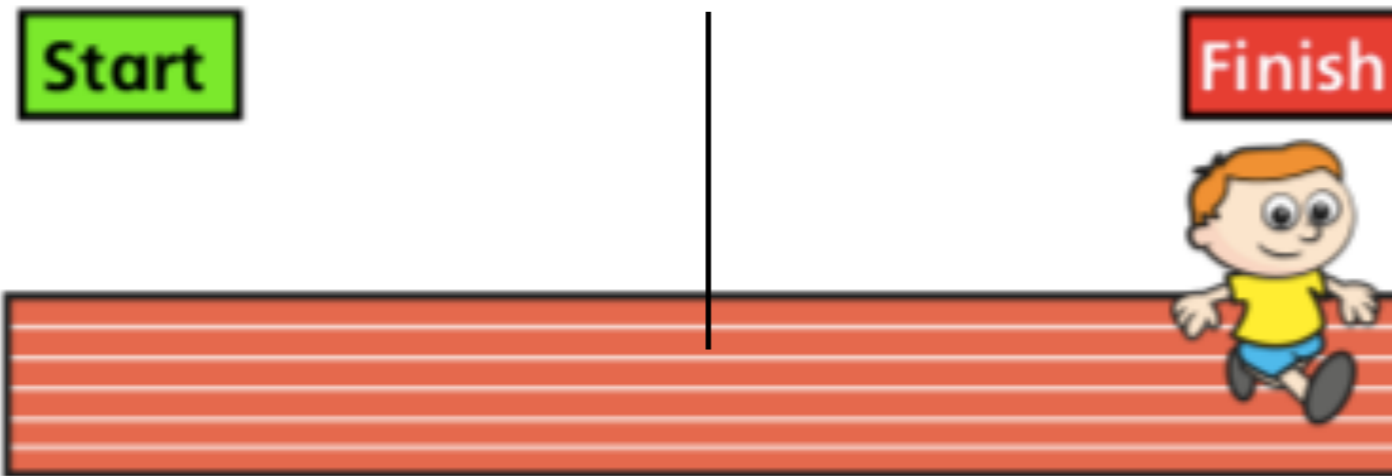$\frac{1}{4}$ of 24

$\frac{1}{4}$ of 12

$\frac{1}{4}$ of 16

12

6

3

4

Which number is the odd one out?

Problem Solving

Using the images to help, match the fractions to their answers.

$\frac{1}{4}$ of 24

$\frac{1}{4}$ of 12

$\frac{1}{4}$ of 16

12

6

3

4

Which number is the odd one out?
12 is the odd one out.

Problem Solving

Ron has run 20 m.

Start **Finish**

Rosie has run half that distance.

a) Draw an arrow on the running track to show where Rosie is.

a) How far has Rosie run? 10 m

Reasoning

Reasoning

Odd One Out

$\frac{1}{2}$

One half

Which is the odd one out?
Explain your answer.

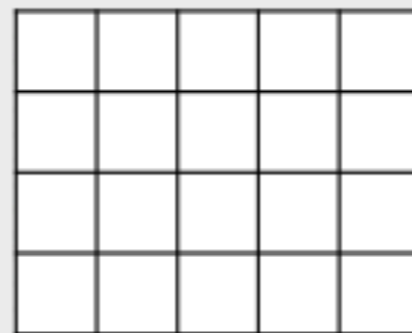Children need to link their explanation to the shape not having two equal parts.
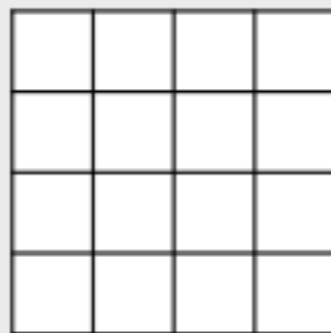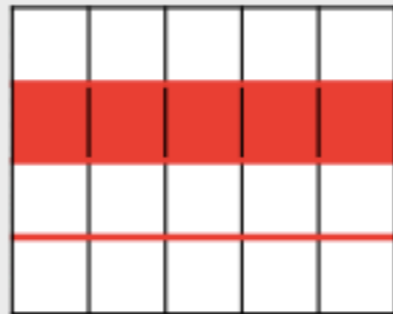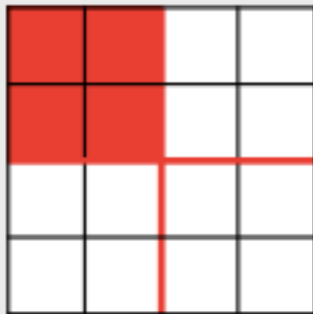
Reasoning

Peter is thinking of a number. What could the number be?

$\frac{1}{4}$ of my number is more than 3 but less than 7.

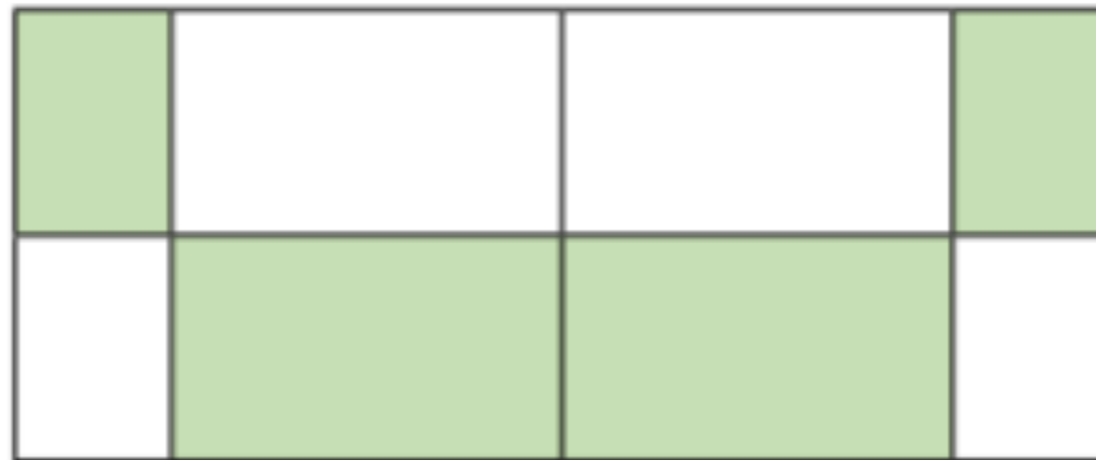Shade $\frac{1}{4}$ of these images to help you.

Reasoning

Reasoning

Reasoning

I am thinking of a number.

?

One third of my number is 12

Which will be greater, one half of my number or one quarter of my number?

Use cubes or a bar model to prove your answer.

The whole number is 36

One half is 18
One quarter is 9

One half of the number will be greater.

Independent Activity

Once the children have completed the questions. Get them to create a poster about everything they have learnt about fractions.