

Year 2

Maths

W.B 18.05.20

Fractions



how many parts you have

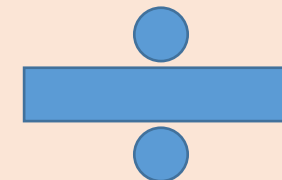


numerator

denominator



how many parts of the whole

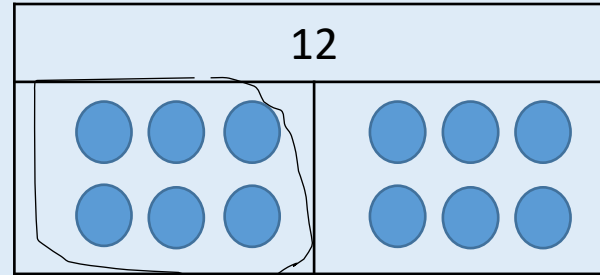


Day 1 – Fractions of amounts.

Steps to Success

1. The denominator (bottom number) tells you how many equal parts to share the number between.
2. The numerator (top number) tells you how many equal parts to count.

$\frac{1}{2}$ of 12.

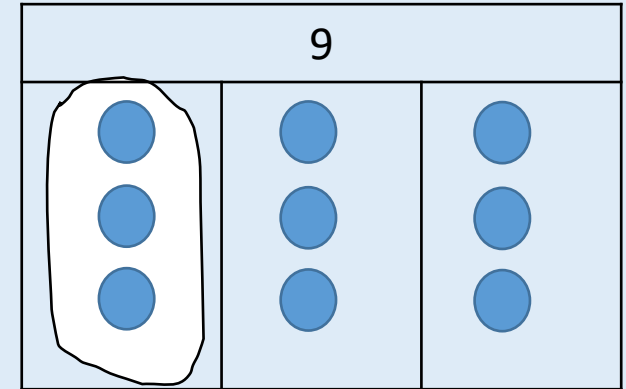


The denominator is 2 so I have shared between 2 groups.

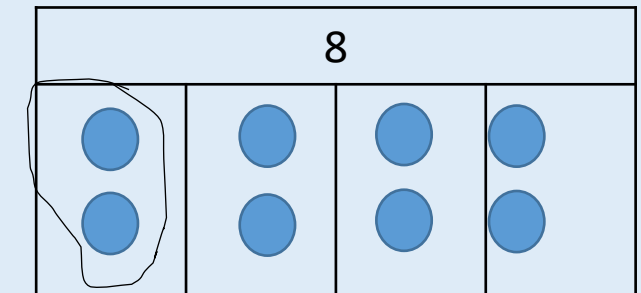
The numerator is 1, so I will count how many are in 1 group.

There are 6 circles in 1 group, so $\frac{1}{2}$ of 12 is 6

$\frac{1}{3}$ of 9 = 3 because...



$\frac{1}{4}$ of 8 = 2 because



Day 1 – Fractions of amounts.

Task 1)

Draw a bar model to work out the following fractions of amounts.

$$\frac{1}{2} \text{ of } 10 =$$

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

$$\frac{1}{3} \text{ of } 6 =$$

$$\frac{1}{2} \text{ of } 20 =$$

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

$$\frac{1}{3} \text{ of } 21 =$$

Finding this a little tricky? Let's focus on sharing amounts into halves.

$\frac{1}{2}$ means 1 out of 2 equal groups so you need to share the objects into 2 **equal** and circle one of those groups.

Find half of each amount.



Now let's try using sentences to explain our learning.

Find half of the amounts and complete the stem sentences.



There are ___ beads.

Half of ___ is ___



There are ___ marbles.

Half of ___ is ___

Now use a bar model, to work out the following fractions of amounts:

$$\frac{1}{4} \text{ of } 4 =$$

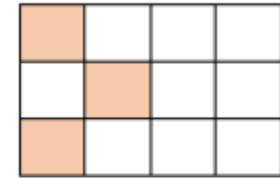
$$\frac{1}{2} \text{ of } 6 =$$

$$\frac{1}{2} \text{ of } 8 =$$

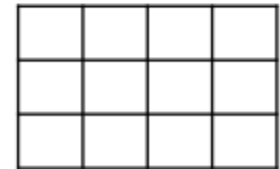
Finding this easy? Have a go at the challenges below.

True or False?

This shows $\frac{1}{4}$



Can you shade the same shape so that it shows $\frac{1}{3}$?

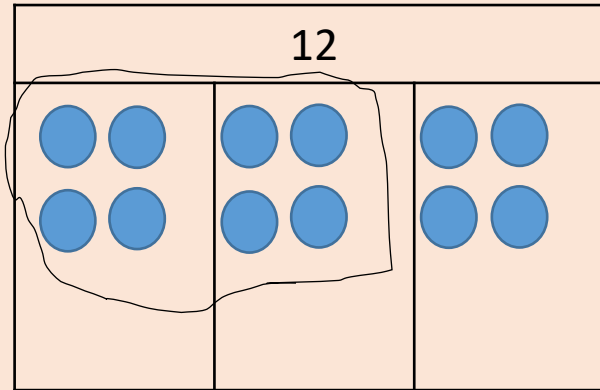


Day 2 – Fractions of amounts.

Steps to Success

1. The denominator (bottom number) tells you how many equal parts to share the number between.
2. The numerator (top number) tells you how many equal parts to count.

$2/3$ of 12.

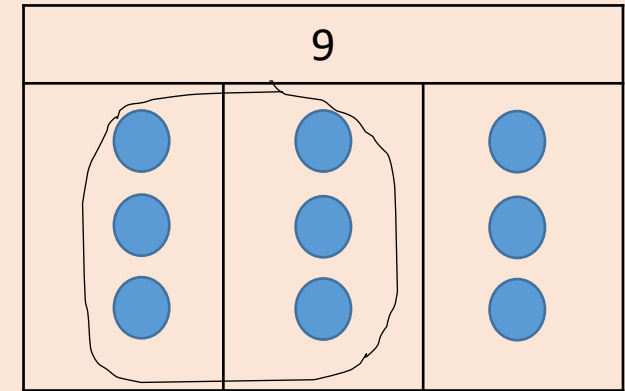


The denominator is 3 so I have shared between 3 groups.

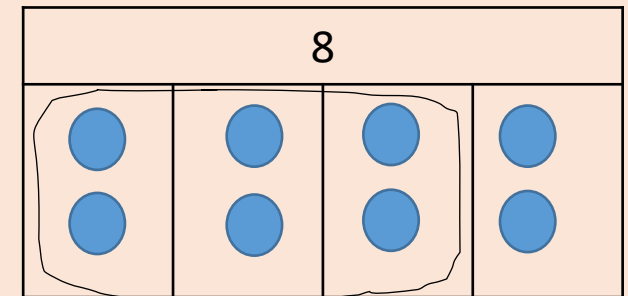
The numerator is 2, so I will count how many are in 2 groups.

There are 8 circles in 2 groups, so $2/3$ of 12 is 8.

$2/3$ of 9 = 6 because...



$3/4$ of 8 = 6 because...



Day 2- Fractions of amounts.

Task 1)

Use a bar model to work out the following fractions of amounts.

$$\frac{2}{3} \text{ of } 15 =$$

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

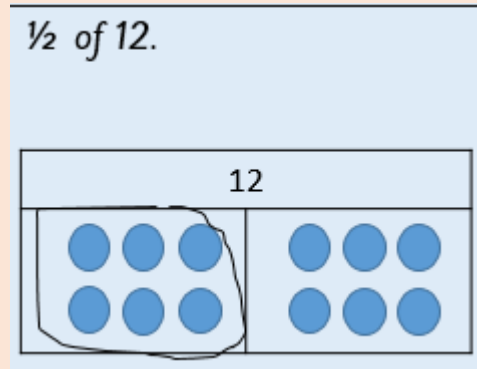
$$\frac{2}{4} \text{ of } 12 =$$

$$\frac{1}{3} \text{ of } 21 =$$

$$\frac{2}{3} \text{ of } 21 =$$

Finding this a little tricky? Let's stick to fractions with 1 as the numerator.

Remember to draw a bar model like this one.



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

$$\frac{1}{2} \text{ of } 20 =$$

$$\frac{1}{3} \text{ of } 9 =$$

$$\frac{1}{2} \text{ of } 14 =$$

$$\frac{1}{4} \text{ of } 20 =$$

Finding this easy? Have a go at the challenge below.

Alex says,

I have shaded $\frac{2}{2}$ of the shape.



What mistake might Alex have made?

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.

Day 3- Equivalent fractions

Today, I am not going to give you the steps to success. We're going to do some exploring instead!

- Using two identical strips of paper, explore what happens when you fold the strips into two equal pieces and four equal pieces. Compare one of the two equal pieces with two of the four equal pieces. What do you notice?



Now, work out the fractions below, using a bar model, and discuss with someone at home what you notice about the answers to the **first and thirds question**.

$$\frac{1}{2} \text{ of } 16 =$$

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

$$\frac{2}{4} \text{ of } 16 =$$

$$\frac{1}{4} \text{ of } 8 =$$

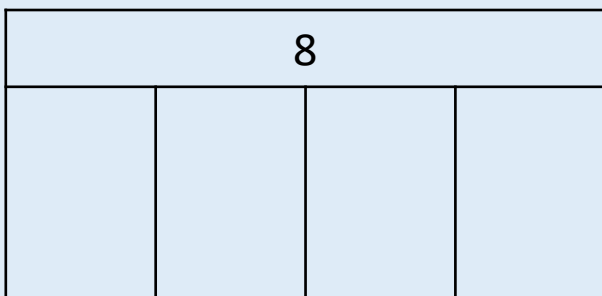
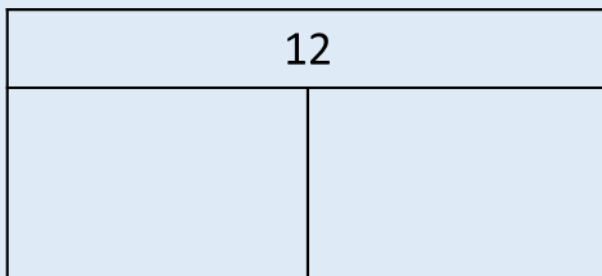
If you're struggling with this, move on two pages.

Day 3- equivalent fractions.

Task 2)

If $\frac{2}{4}$ and $\frac{1}{2}$ are the same, would $\frac{1}{2}$ of 12 and $\frac{2}{4}$ of 8 be the same?

Prove your answer with the bar models below.



Challenges.

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

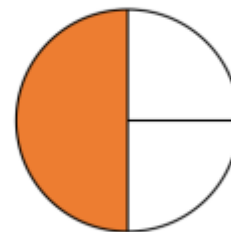


Who gets the most cookies?

Whitney says:



I have shaded a third of my shape.



Do you agree?
Explain why.

Why do you think Whitney thinks this?

Day 3 – Equivalent fractions.

Struggling with today's lesson? Don't worry we can look at this in a different way.

Go and get 8 objects from your house. They could be toys, pencils, crisps. Anything you can find! Your grown up needs to get 8 objects as well.

I want you to find one half of your objects.

Grown ups, I want you to find two quarters of your objects!

Now, each of you need to count how many you have. What do you notice about how many objects you each have?

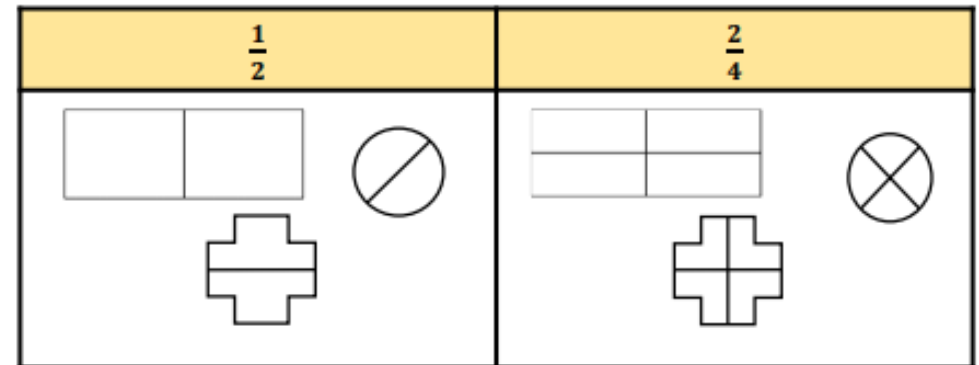
Now have a go at this →

Remember, the top number tells you how many to shade.

The bottom number tells you how many parts there are.

Tell your grown up what you notice about the two sides of table.

Shade one half and two quarters of each shape.



Day 4 – Application

Today, we're going to use what we've learnt so far to solve the problems below.

A shop has 12 bags of crisps.

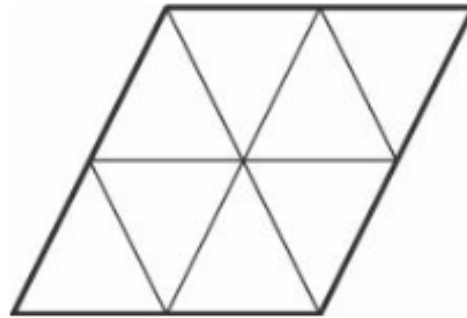


It sells $\frac{1}{4}$ of the bags.

How many bags of crisps did the shop **sell**?

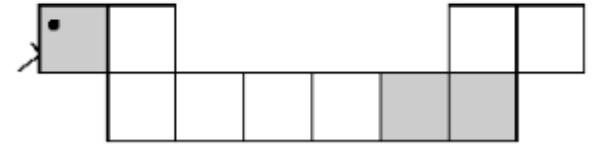
 bags

Colour $\frac{1}{2}$ of this shape.



3 squares on the snake are filled in.

Fill in more squares to cover **half** of the snake.



Ben ate half a pizza.



Which fraction shows the amount he ate?

Circle it.

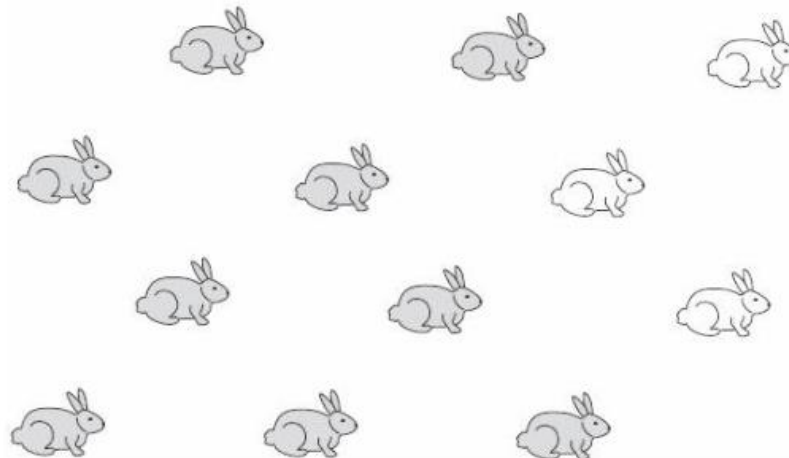
$\frac{1}{4}$

$\frac{1}{3}$

$\frac{2}{4}$

$\frac{3}{4}$

What fraction of these rabbits is **grey**?



Complete the number sentences.

One is done for you.

$$\frac{1}{2} \text{ of } \boxed{8} = 4$$

$$\frac{1}{2} \text{ of } \boxed{} = 3$$