

Maths Week 4 - Fractions

Monday - Finding a quarter of a number

Tuesday - Finding third of a number

Wednesday - Finding two quarters of a number, two thirds of a number, ACTIVITY TO UPLOAD-FINDING THE DIFFERENT FRACTIONS TAUGHT SO FAR THIS WEEK OF A NUMBER

Thursday - Word problems ACTIVITY TO UPLOAD

Friday - Mental Maths

Lesson 1 - Finding a quarter of a number

In this lesson we will continue with finding fractions of a number, today focussing on finding a quarter of a number.

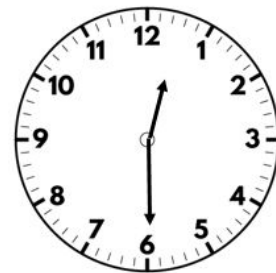
1) Is 14 odd or even?

2) What is $18 \div 2$?

3) There are 5 pencils in a pot.
How many pencils in 3 pots?



4) How many tens are there in 24?



5) What's the time?

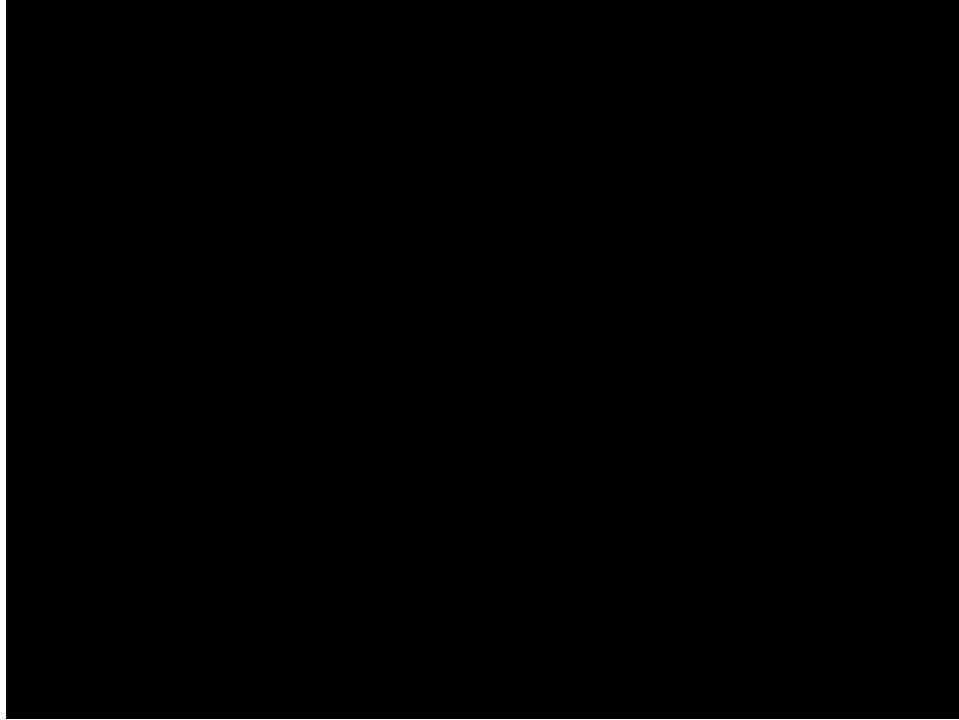
Last week we started learning about fractions. First we looked at finding a fraction of a shape, and on Thursday we found half of a number. Try this problem below as a recap.



There are 12 sweets in my jar.
If I give Burlington Bear half, how many would I have left?

Once you have given it a go, move onto the next slide where Mr Johnson will recap how to find half of a number.

Click the video to watch Mr Johnson recap the square and counter method!



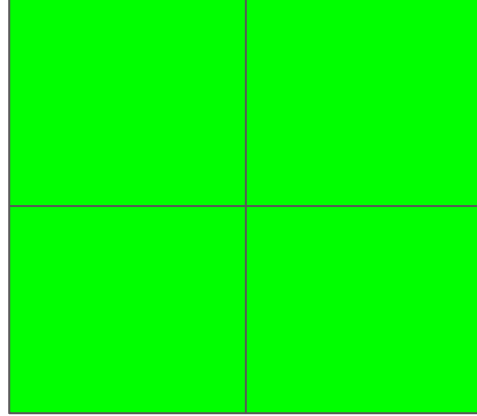
Now that you're experts at finding half of a number, we're going to try and find a quarter of a number!

Can you remember how many parts there will be when we are finding quarters of something?



Halves

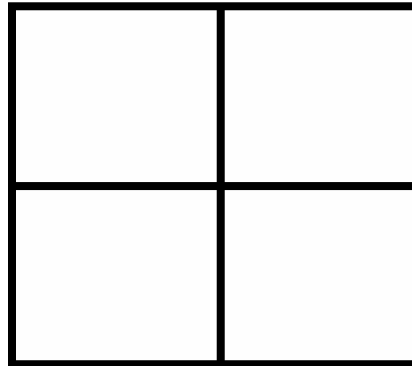
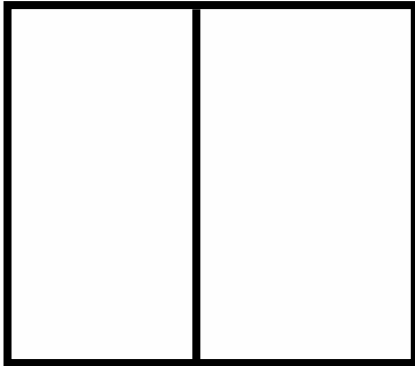
Quarters



Sam has 12 teddies.
She puts $\frac{1}{4}$ of them on her bed.
How many teddies go on her bed?

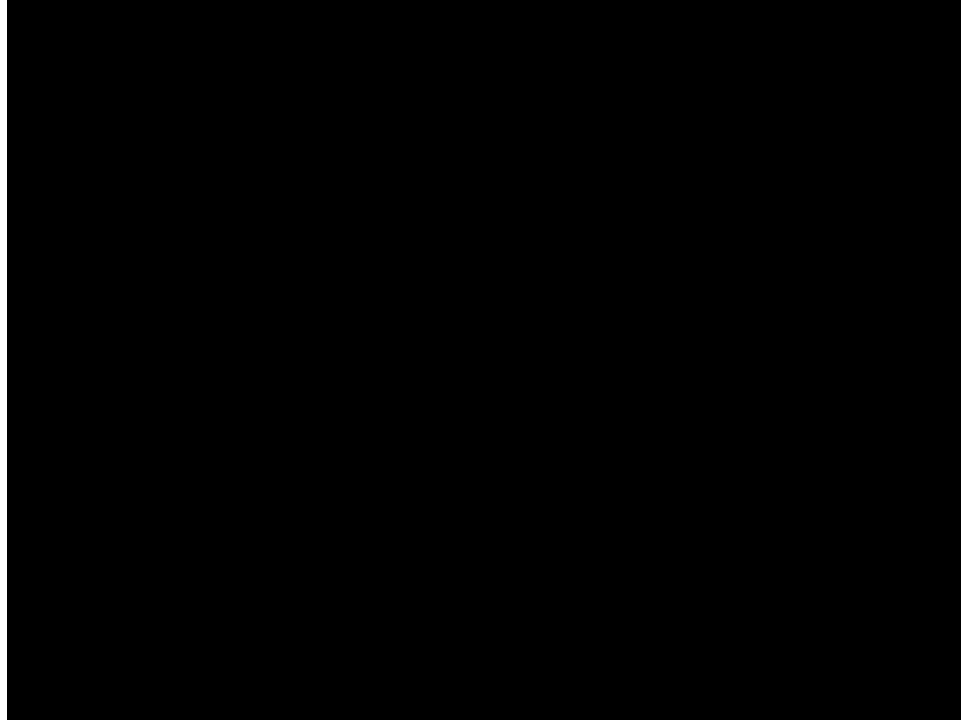


Which square and counter method will help me solve this problem?



If you're feeling confident you could try this problem, or if you'd like a bit of help, go to the next slide where Mr Johnson will explain how to work this out.

Click below to watch Mr Johnson explain how to find a quarter of a number using the square and counter method!



Your turn!

Paddington has 16 sandwiches.

He eats $\frac{1}{4}$ of them.

How many did he eat?

The whole is _____. A quarter of _____ is _____.

Challenge: How many are left over?



Find $\frac{1}{4}$ of these numbers:

8

12

20

24

Lesson 2 - Finding a third of a number

In this lesson we continue with finding fractions of a number, this time looking at finding a third.

We will do this by looking at a third of a shape first and then using this to help us find a third of a number.

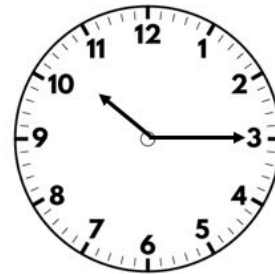
1) Divide 20 by 5

2) What is $20 \div 10$?

3) How much money altogether?



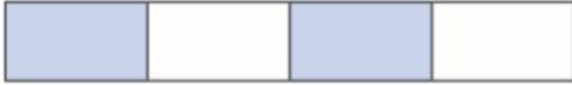
4) How many tens are there in 87?



5) What's the time?

Choose the shape that has exactly $\frac{1}{3}$ shaded.

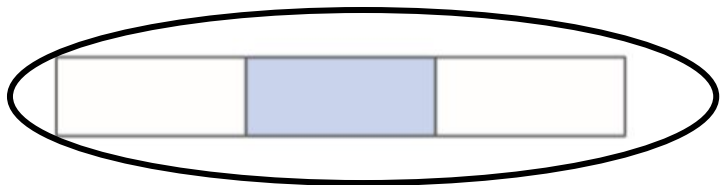
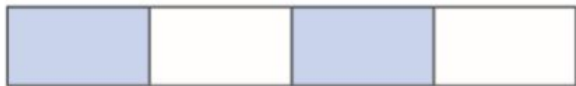
Tick the shape that has exactly $\frac{1}{3}$ shaded.



How do you know?

Well done! We know it is this shape because it has got 3 **equal** parts and one of those parts is shaded.

Tick the shape that has exactly $\frac{1}{3}$ shaded.



Let's warm up our brains by finding halves and quarters of the number 12.



$$\frac{1}{2} \text{ of } 12 =$$

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

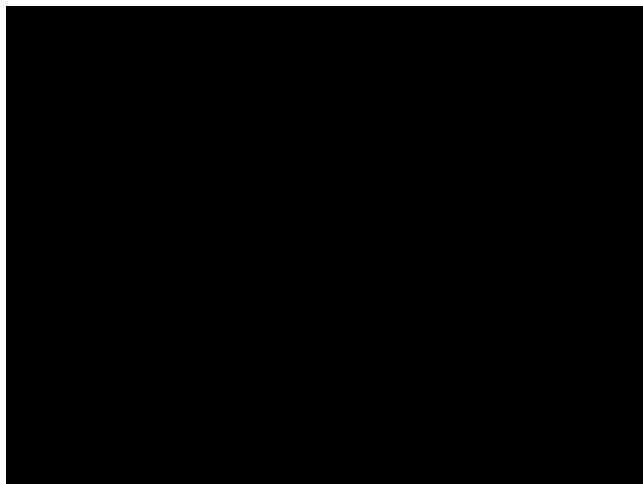
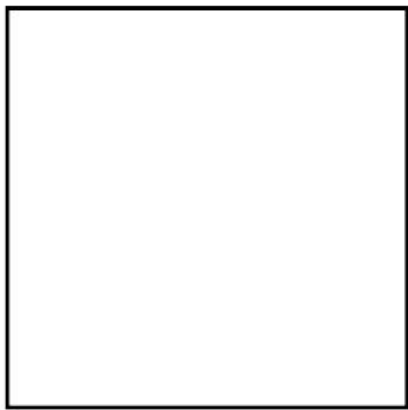
Remember: the bottom number tells us how many parts to split it into and the top number is how many parts we are trying to find.

You're all experts at finding halves and quarters of numbers now!

Florence Nightingale has found out how good you are with fractions and has asked you to help her with some problems.



$$\frac{1}{3} \text{ of } 12 = ?$$



The _____ is split into _____ equal parts.
Each part is worth _____, a _____.

Florence has 9 bandages.

$\frac{1}{3}$ are red.

How many bandages are red?



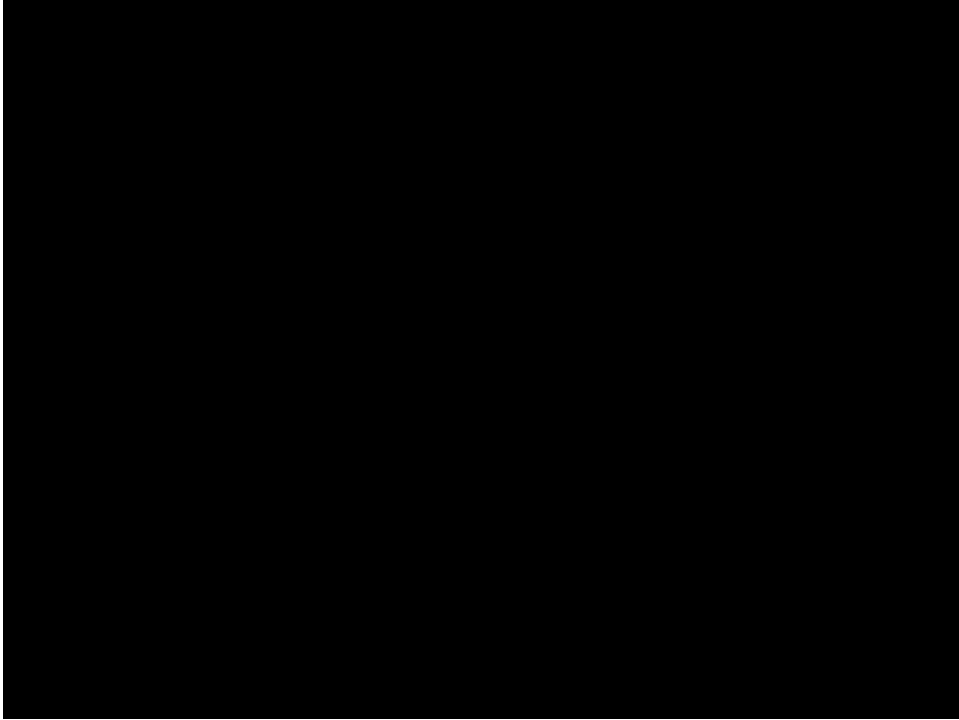
There are _____ bandages altogether

One third of ____ is ____

$\frac{1}{3}$ of ____ is ____

Challenge: How many are not red?

Click below to watch Mr Johnson explain the previous question.



Florence has 15 patients.

$\frac{1}{3}$ get to go home today.

How many patients go home?

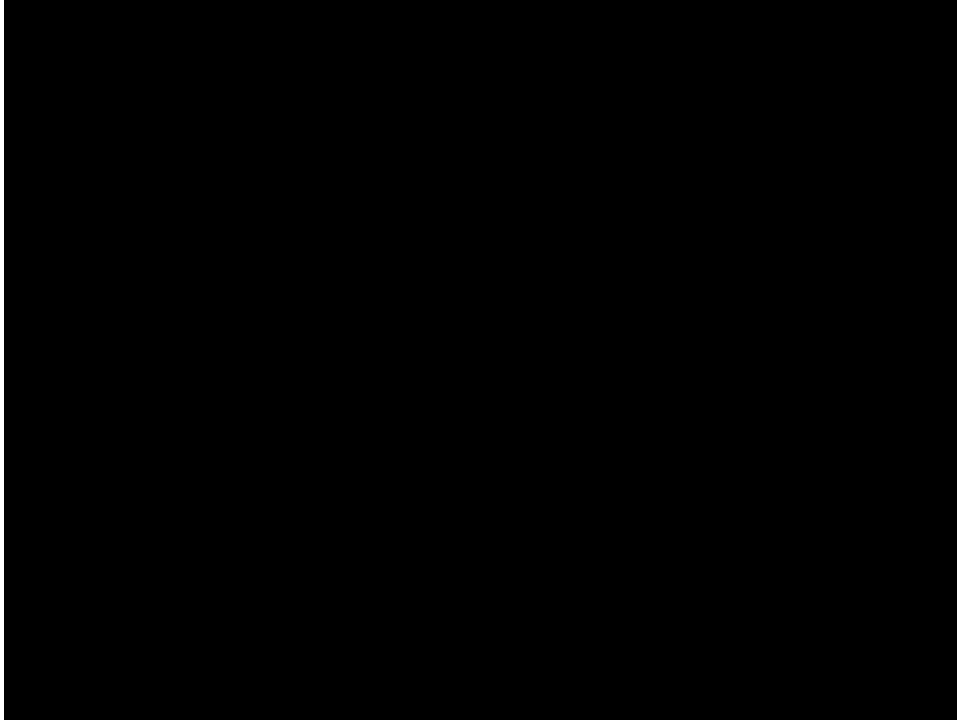


There are _____ patients altogether

One third of ____ is ____

$\frac{1}{3}$ of ____ is ____

Click below to watch Mr Johnson explain the previous question.



What is Burlington Bear's good mistake?

Florence has 12 bowls of soup.

$\frac{1}{3}$ of the bowls are cold. How many bowls are cold?

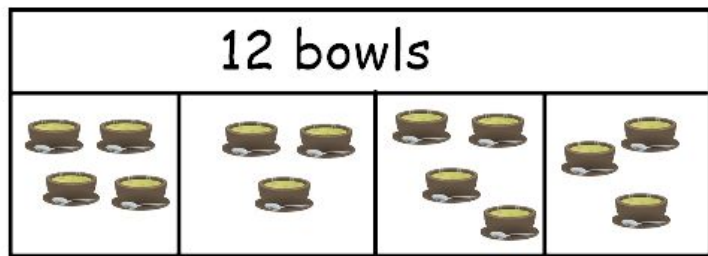
3



Florence has 12 bowls of soup.

$\frac{1}{3}$ of the bowls are cold. How many bowls are cold?

3



I think you have divided the number into 4 parts.
When you divide a number into thirds you need to
divide it into 3 equal parts.

When you drew the soups you drew too many. You
were meant to draw the total number of soups
which is 12.

Activity: Can you find a third of these different numbers?
Don't forget to show your working out!

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

$$\frac{1}{3} \text{ of } 12 =$$

$$\frac{1}{3} \text{ of } 30 =$$

Challenge!

Would you rather a
 $\frac{1}{4}$ of £20 or $\frac{1}{2}$ of £8?



Challenge 2!

Burlington Bear has been offered $\frac{2}{4}$, $\frac{1}{3}$ and $\frac{3}{4}$ of a bag of 48 oranges.

Which should he take? Why?



Lesson 3 - Finding 2 quarters and 2 thirds.

In this lesson we learn about finding 2 quarters and 2 thirds.

It is important to remember that the steps say the same until you circle the parts at the end.

At this point you look at the top number in the fraction which will tell you how many parts to circle, giving you your answer.

Activity to upload: slide 35

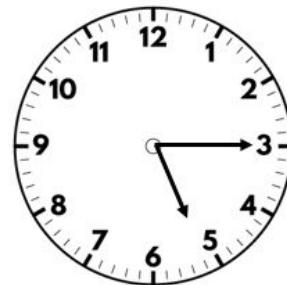
1) Calculate $15 \div 5$

2) Multiply 2 by 7

3) How much money altogether?



4) Find the sum of 22 and 35



5) What's the time?

Starter:

How many of these questions can you solve in 2 minutes?

$\frac{1}{3}$ of 12

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

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

$\frac{1}{2}$ of 24

$\frac{1}{3}$ of 30



So far we have learnt about finding halves, quarters and thirds.

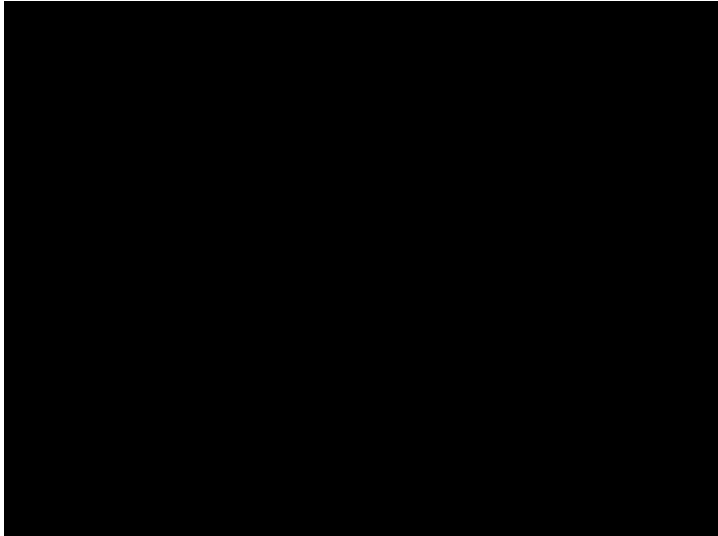
Sometimes we need to find more than one quarter or more than one third, let's find out how we do that!



Burlington Bear has 8 counters.

He wants to find $\frac{2}{4}$ of these counters.

Let's look at how we do this with Mr Johnson.

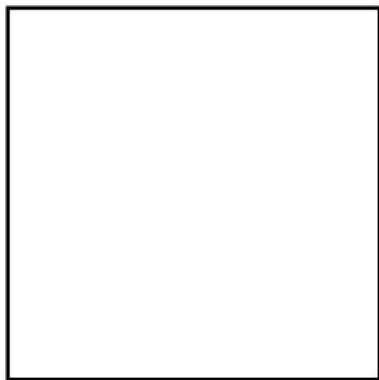


Your turn!

There were 12 Sneak Thieves.

Flat Stanley caught $\frac{2}{4}$ of them.

How many did Stanley catch?



How do we know how many equal parts to divide the square into?

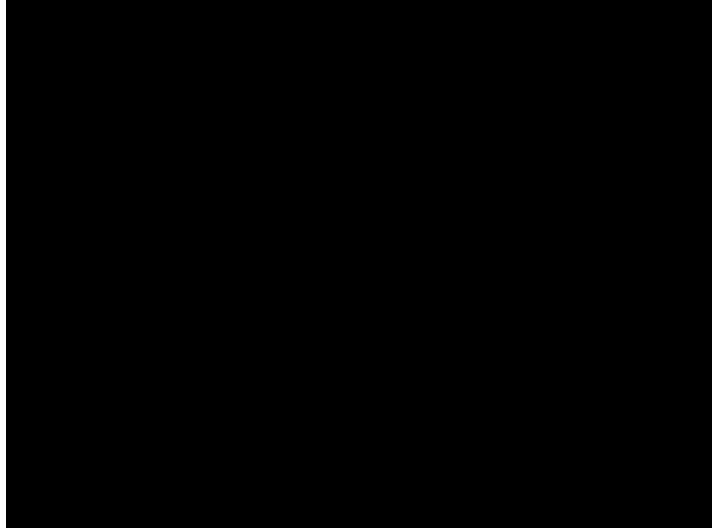
Burlington Bear has 15 counters.

He gives $\frac{2}{3}$ away.

3

How many did he give away?

Let's look at how we do this with Mr Johnson.



Your turn!

The Sneak Thieves stole 9 paintings.

They sold $\frac{2}{3}$ of them.

How many did they sell?



Activity to upload: Can you try these ones now?

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

$$\frac{1}{3} \text{ of } 15$$

$$\frac{3}{4} \text{ of } 12$$

$$\frac{2}{4} \text{ of } 20$$

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

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

Lesson 4 - Word problems

In this lesson the children will apply what they have learnt about fractions into word problems.

The children are encouraged to read through the questions multiple times so they really understand what it is asking them to do. We suggest that they underline key information within the questions too.

Activity to upload:

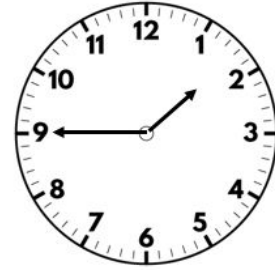
1) Calculate $80 \div 10$

2) Multiply 5 by 6

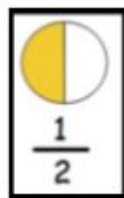
3) How much money altogether?



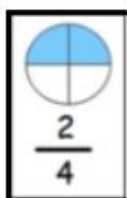
4) Find the sum of 26 and 44



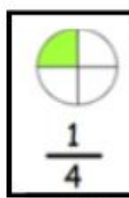
5) What's the time?



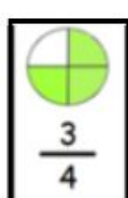
half



two quarters

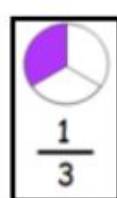


quarter



three quarters

Fraction Fun!



third

half of 16 =

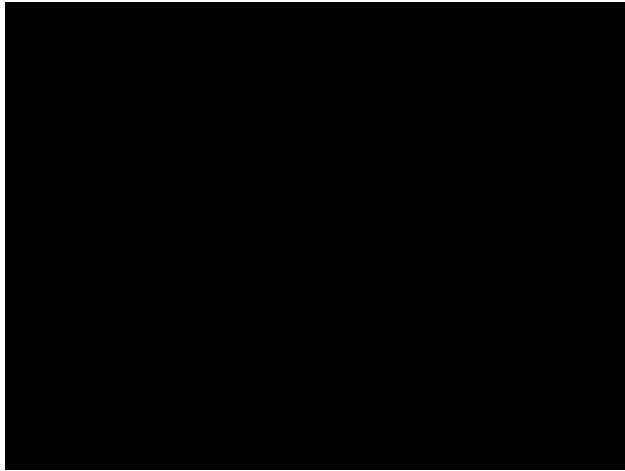
quarter of 16 =

third of 15 =

two quarters of 8 =

three quarters of 20 =

Jo bought a bag of 12 cherries.
Jo ate half the cherries in the bag.
How many did Jo eat?



Click the video above to watch Mr Johnson
explain how to work this out.

Jo bought a bag of 12 cherries. $\frac{3}{4}$ of the cherries fell on the floor.

How many did Jo drop on the floor?



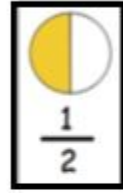
Click the video above to watch Mr Johnson explain how to work this out.

Your turn!

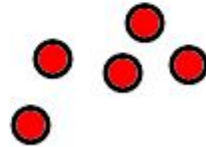
Remember to read the question a few times and underline the key information!

$\frac{1}{2}$ of Florence Nightingale's pills are red.

The other 5 are orange. How many pills does she have altogether?



$$\frac{1}{2} \text{ of } \underline{\quad} = 5$$



Sarah has 16 sweets. She eats $\frac{1}{4}$

How many does she eat?

Challenge: How many does she have left?



The dentist has 12 tubes of toothpaste.

He gives his patients $\frac{3}{4}$ of them.

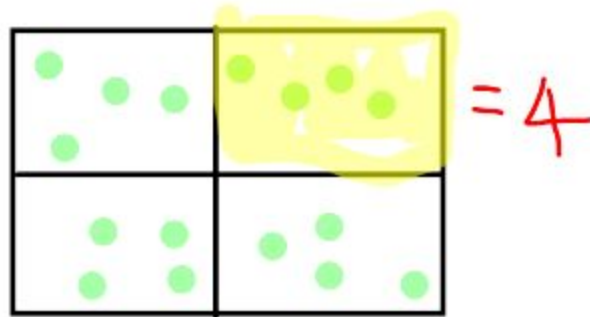
How many does he give away?

Spot my mistake.

Mr Johnson buys 16 chocolate bars.

He eats $\frac{1}{2}$ of them.

How many did he eat?



Mr Johnson ate 4 chocolates.

Answer on the next page.

Oops! Mr Johnson divided his 16 chocolates into 4 equal parts. When you divide a number into 4 equal parts what are you are dividing?

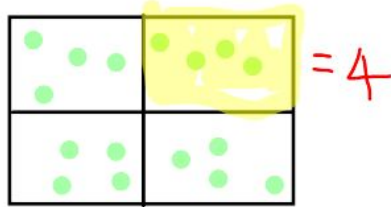
In the problem Mr Johnson ate half. When you find half of a number you divide it into 2 equal parts.

Spot my mistake.

Mr Johnson buys 16 chocolate bars.

He eats $\frac{1}{2}$ of them.

How many did he eat?



Mr Johnson ate 4 chocolates.

Activity to upload - Word Problems

Please see 'lesson 4 word problems sheet' and decide which questions you would like to ask your child to complete.

It would be lovely to see your child finding a half, a quarter, a third and three quarters of a number.

In class we would complete between 4-6 questions but please decide how many you would like your child to complete.

There are some super challenge questions that you may ask your child to try. These are word problems that have 2 parts. There is a super challenge on the next slide and on the sheet.

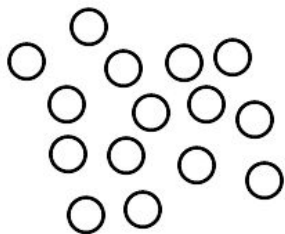
Super challenge!

We are now going to try some problems that have 2 parts to solve.

Let's try!

Mrs MacMillan bought 15 sweets. She ate $\frac{1}{3}$ of them.

She then gave $\frac{1}{2}$ to Saturn class. How many did Saturn class get?



Lesson 5 - Mental Maths - Add and Subtract 11

Focus - To add and subtract 11 from any 2 digit number.

1. **Recap/Introduce** - Can we remember 'The 9 Trick' we learnt last week? What did we have to do? 11 is 'one more than 10'.
2. **Teach** - Using knowledge of near 10s and the concept of 'The 9 Trick'? we look at using an empty number line to help support the children to visualise adding/subtracting 11 from a 2 digit number by compensating.
3. **Apply** - Apply understanding and strategy to add and subtract 11 from a 2 digit number.

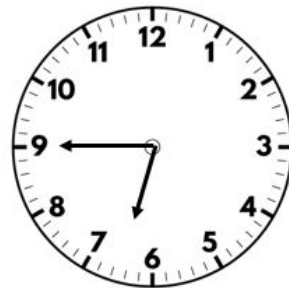
1) What is $40 \div 10$?

2) Divide 40 by 5

3) How much money altogether?



4) Find the difference between 100 and 65

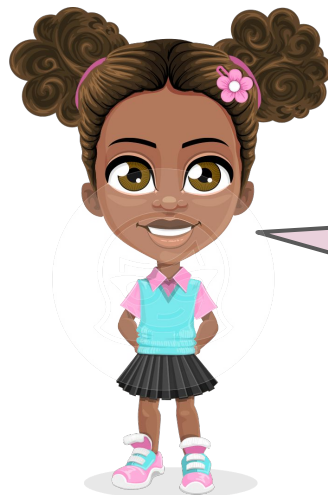


5) What's the time?

Share your own
ideas!

What can you tell
me about the
number

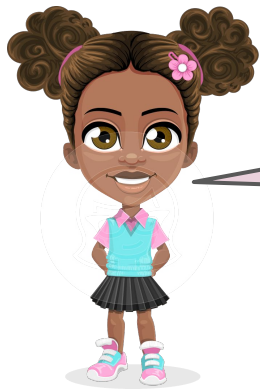
11?



It is made up
of
1 Ten and
1 One.

It's one
more than
10!

We can use
the idea of
'The 9 Trick'
to help us
because 9 is
one less and
11 is one more
than 10!

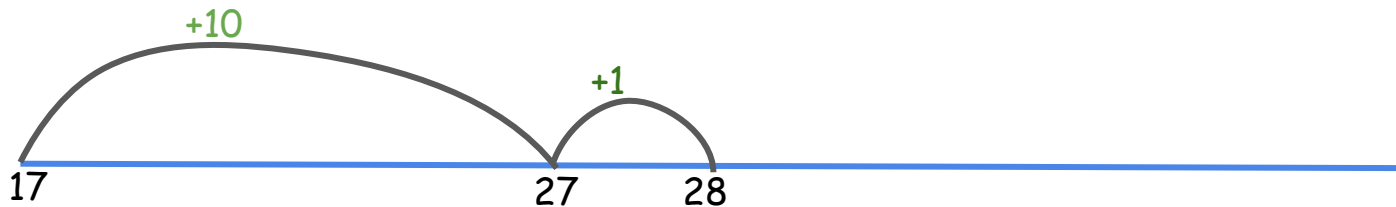


11 is just one
more than 10....
This is easy,
look!

We can use an **empty**
number line to help you
visualise the steps to
solve this!

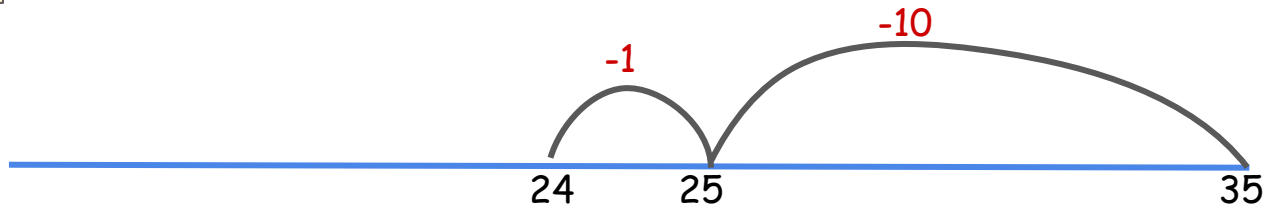
$$17 + 11 = \square$$

To add 11, I can add 10 first then just add 1 more.



$$35 - 11 = \square$$

To subtract 11, I can just takeaway 10 and then minus 1 more!



Can you solve these problems using your mental strategy?



$$5 + 11 = ?$$

$$15 + 11 = ?$$

$$20 + 11 = ?$$

$$20 - 11 = ?$$

$$26 - 11 = ?$$



$$18 + 11 = ?$$

$$28 + 11 = ?$$

$$30 + 11 = ?$$

$$30 - 11 = ?$$

$$37 - 11 = ?$$



$$12 + 11 = ?$$

$$40 + 11 = ?$$

$$49 + 21 = ?$$

$$69 - 11 = ?$$

$$71 - 21 = ?$$