ALL KINDS OF NUMBERS!

Numbers are amazing! We only have 10 number symbols, but they can be used to write any size of number that we want and can do all sorts of clever things.

Odd and even numbers

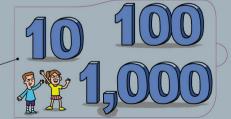
Even numbers are whole numbers that can be divided exactly into pairs. Odd numbers are whole numbers that cannot be divided exactly into pairs – there is always one left over. Can you spot all the odd house numbers on this street? Now point to all the even numbers.

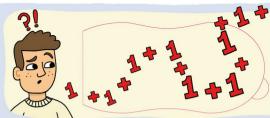


Big numbers

Look at these numbers. Can you point to the biggest one?

We can tell how big a number is by how many zeros there are on the end of it. The more zeros there are, the bigger the number. Each time you add a zero to the end, the number gets 10 times bigger.





Prime numbers

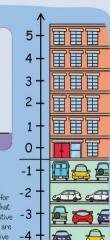
Some numbers, such as 2, 3, 5, 7 and 11, can only be evenly divided by themselves, or by the number 1. These are called prime numbers.



Positive and negative numbers

Look at the floor numbers for this building. The numbers that are bigger than zero are positive numbers. The numbers that are below zero are called negative numbers. Negative numbers

have a minus sign (–) in front of them.

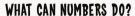


What is infinity?

You can always add

one on to a number

... and keep going forever! This idea is called infinity.



When you start looking, you'll notice that numbers are everywhere! Let's see how numbers can help people in this busy café.









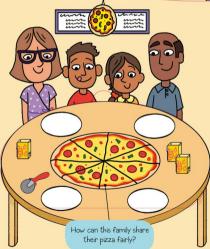
sausages for each of her dogs. How can she find out how many sausages she needs to buy?



Mental maths

Sometimes, it's very useful to work out sums without having to write anything down - like when you are in a café. This is called mental maths. You just use your brainpower! Learning the times tables off by heart is a great way to help with mental maths.





Square numbers and square roots

If you multiply a number by itself, this is called squaring.

 $3 \times 3 = 9$

Square numbers can be arranged in a square shape.



Finding the square root of a number is the opposite of squaring a number. The square root of 9 is 3 because $3 \times 3 = 9$