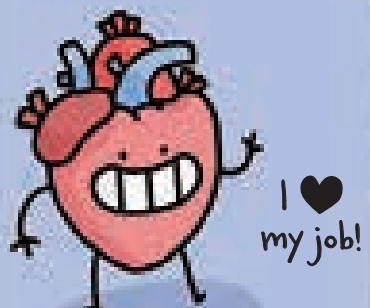


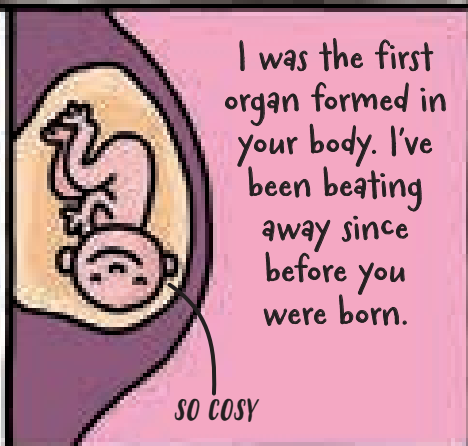
A DAY IN THE LIFE OF A ...

HEART

I'm a human heart, and I'm PUMPED!



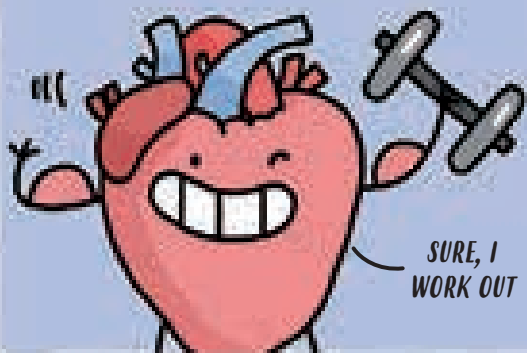
I ♥ my job!



I was the first organ formed in your body. I've been beating away since before you were born.

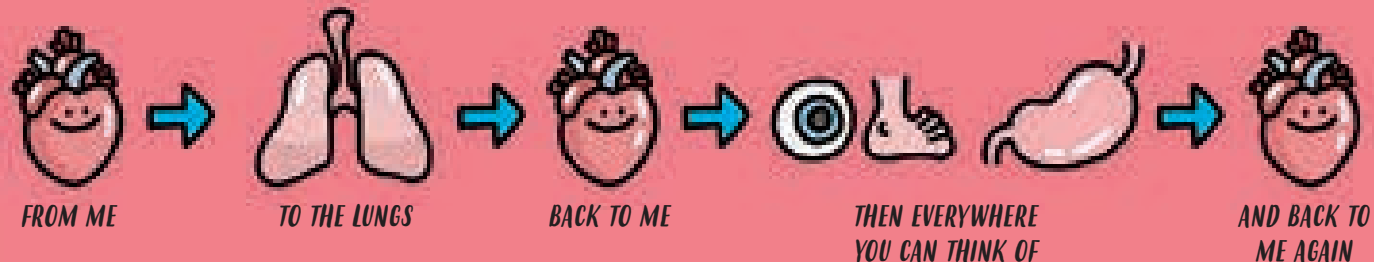
SO COSY

You can find me in your chest, just between the lungs. I pump blood around your body all day long - so it's a good job I'm made of tough, muscular tissue.

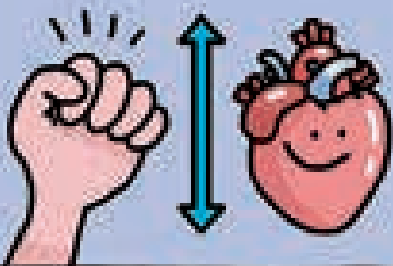


SURE, I WORK OUT

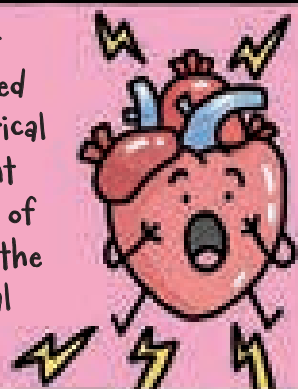
I send blood on a 19,000 km journey all around your body each and every day - just short of the distance from London to Tokyo and back.



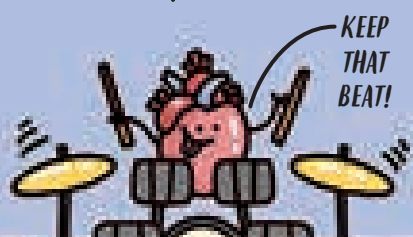
Not bad for an organ about the size of your fist.



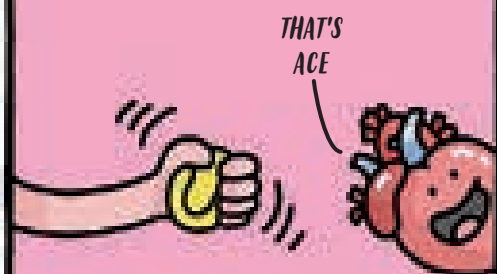
My beat is controlled by an electrical signal sent by a group of cells called the sinoatrial node.



When you're resting, I beat around 60-100 times per minute.

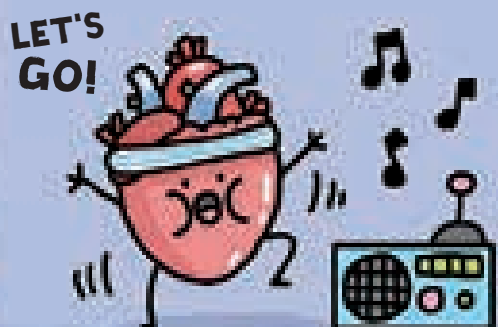


Each beat contains the same force needed to squash a tennis ball.



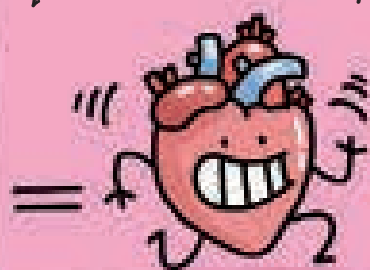
THAT'S ACE

I have to keep pretty fit to do all this, so stay active and healthy.



LET'S GO!

In the time you've taken to read this page, I've done around another hundred squeezes. See, I never stop.



THE BIGGER PICTURE

HEART HERO



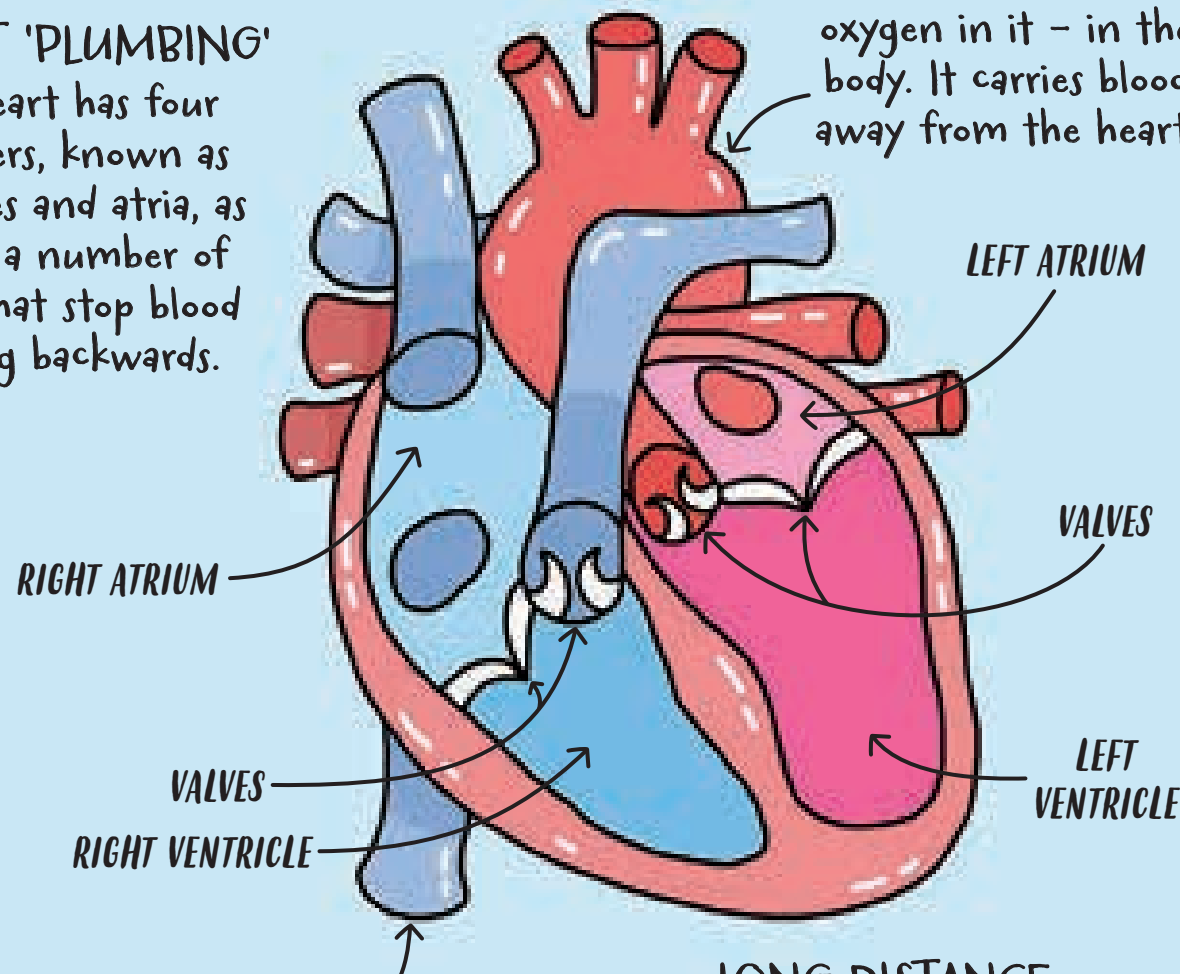
The human circulatory system is a network of tubes called blood vessels that pump blood around your whole body. I'm at its, erm, heart.

AORTA

This is the biggest 'artery' - a tube that carries blood with oxygen in it - in the body. It carries blood away from the heart.

PERFECT 'PLUMBING'

The heart has four chambers, known as ventricles and atria, as well as a number of valves that stop blood flowing backwards.



INFERIOR VENA CAVA

This is the largest 'vein' - a tube that carries oxygen-depleted blood - in your body. It returns blood from your lower half.

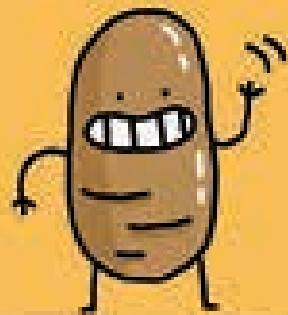
LONG DISTANCE

Including all the very narrow vessels called capillaries, there are over 96,000 km of blood vessels in the body, which is more than twice the distance around the Earth.

A DAY IN THE LIFE OF A ...

POO

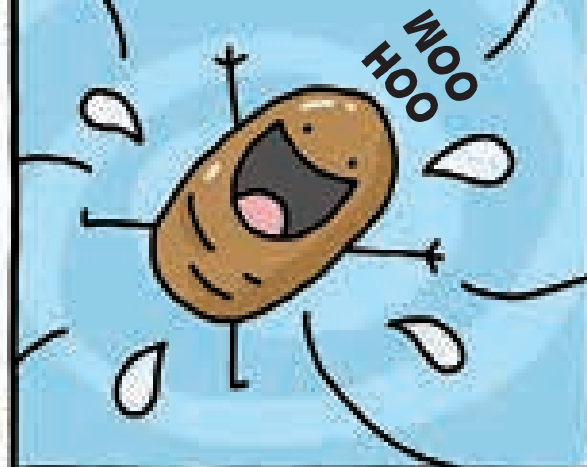
What a day I've had. It's all go when you're a poo.



First I got flushed ...



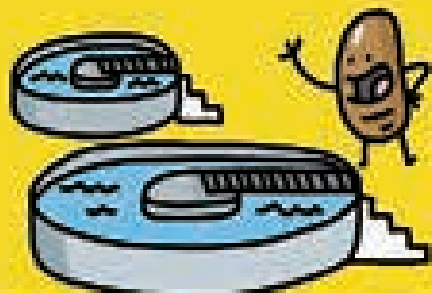
... And I went on the ride of my short life.



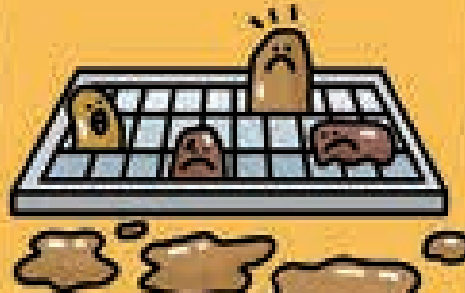
After that, your wee and I, as well as lots of other poos, flowed through a series of pipes into a massive sewer.



The sewer led to a waste water treatment plant ...



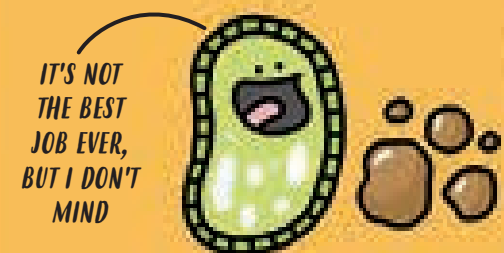
... Where we were squished through a series of sieves ...



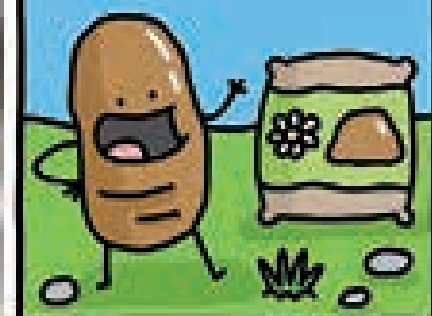
... Turning all of us poos into sludge.



The sludge was then sent to be broken down by special bacteria.



Some of it was turned into fertilizer* for crops.

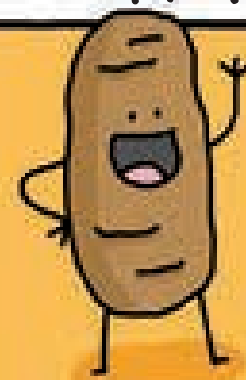


Which can go into growing new food. Cool, eh?



THE BIGGER PICTURE

YOU AND YOUR POO



Poos can give you a clue as to what's going on inside your gut. Hard poos are a symptom of 'constipation' - that's when you find it difficult to go. Runny poos are a sign of 'diarrhoea' - that's when you can't stop going. Why not check your poos against these poos below and find out what they mean?



SMALL, HARD LUMPS
Very constipated, can be painful.



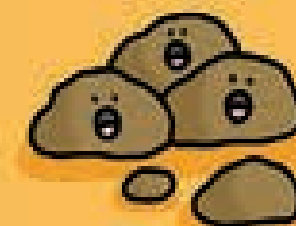
LUMPY SAUSAGE
Mild constipation. Eat more veggies and drink more water.



CRACKED SAUSAGE
This is a good poo. Well done, keep up the good work.



SMOOTH SAUSAGE
Another good poo. You're a poo champ!



SOFT BLOBS
More fibre needed in your diet, this is a loose poo.



MUSHY STUFF
Mild diarrhoea. You might be ill.

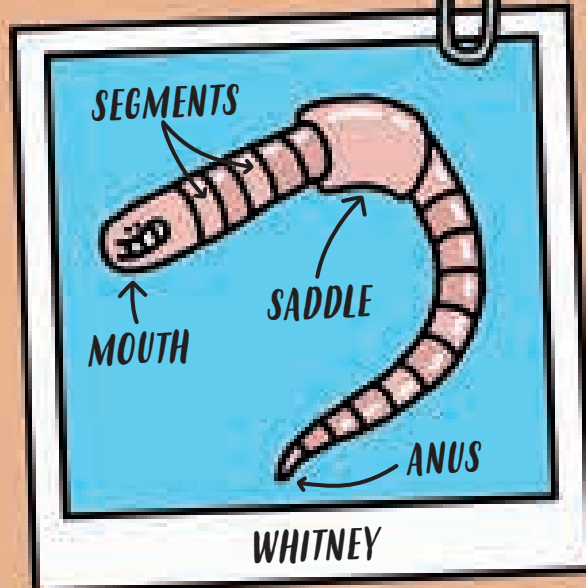


LIQUID POO
DANGER! It's the poo of nightmares.

* FERTILIZER IS A SUBSTANCE ADDED TO SOIL OR LAND TO HELP PLANTS GROW

The secret diary of an
EARTHWORM

This extract is from the diary of Whitney, an earthworm living under a garden lawn in Europe.



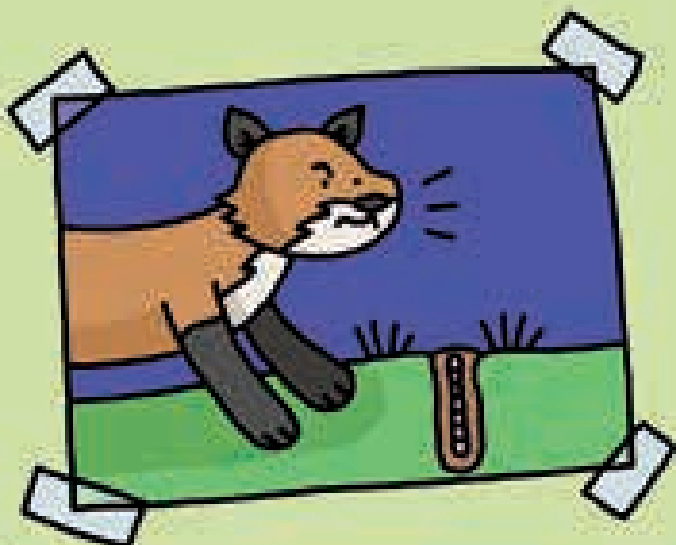
MONDAY

I'm writing this in my burrow under the lawn before heading up top tonight. I sensed the vibrations of raindrops thudding on the grass earlier, so I know it will be lovely and wet up there. Looking forward to feasting on dead leaves - yum!



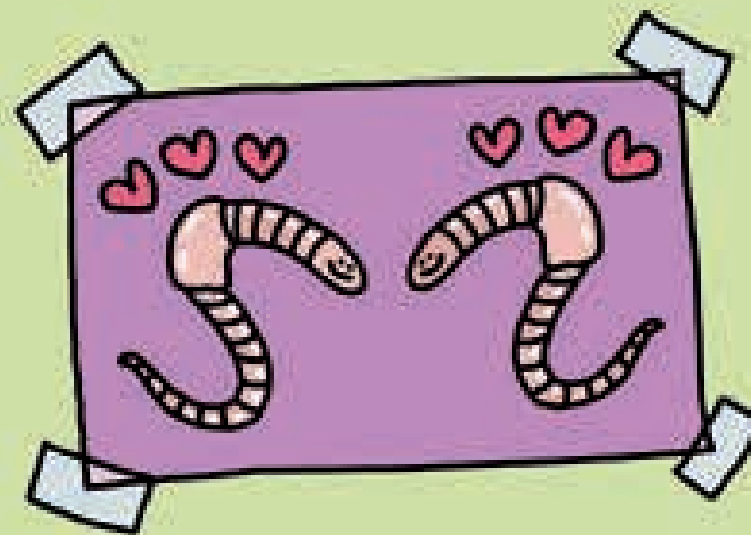
TUESDAY

Well, what a night it was. I was chomping on a nice old oak leaf, half in, half out of my burrow, when suddenly, footsteps! A sneaky fox tried to make me its supper. Luckily, I pulled myself back down into my burrow just in time. You could say I outfoxed him.



WEDNESDAY

More mammal troubles! Today I had a mole in my hole. I could sense it burrowing towards me so this time I fled upwards, fast. It was all very scary - good job worm poo is good for the soil.



THURSDAY

I've found myself a partner. A worm can be both male and female, and we will each be laying lots of little eggs in the near future.

FRIDAY

OUCH! I got chopped in half by a spade today while I was minding my own business. I miss my wiggly tail, which will die, but at least I can grow a new one. Still, it's unlikely I'll ever beat the world record for the longest ever earthworm, which stands at an amazing 61 cm.



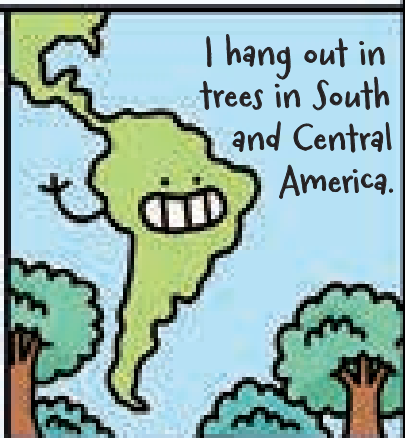
A DAY IN THE LIFE OF A ...

SLOTH

Hi, I am the world's slowest mammal. My top speed is around 4 m a minute.



NEARLY AS SLOW AS ME!



I hang out in trees in South and Central America.



And when I say HANG, I mean HANG!

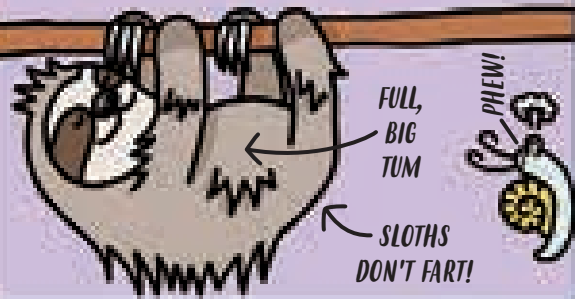
WOAH!

I spend the night upside down eating leaves ... VERY SLOWLY.



WHO NEEDS FAST FOOD?

I then spend the day upside down digesting them.



FULL, BIG TUM
SLOTHS DON'T FART!



A single leaf can take me a month to digest.



THERE'S NO HURRY!

Then once a week I do something different. I climb to the bottom of a tree and ...

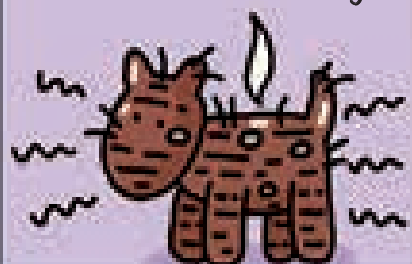


... Do a HUGE POO! It's equal to one-third of my body weight.



3 KG POO

This is like you doing a poo the size of a small dog.



HELLO THERE!

I never get lonely because my fur is full of ticks, fleas, mites, moths, fungi and algae.

So, I'll be off now.



BYE

One hour later ...

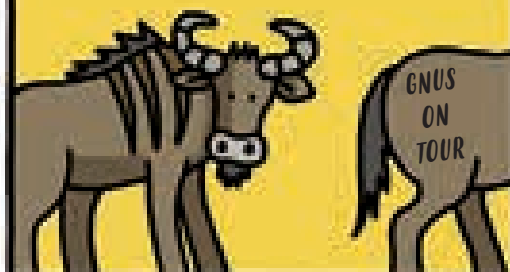


HURRY UP!

A DAY IN THE LIFE OF A ...

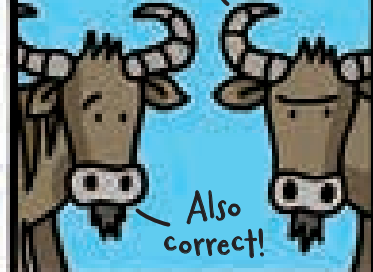
GNU

How do you do? I'm a gnu. (It's pronounced 'noo') Welcome to our mass migration.



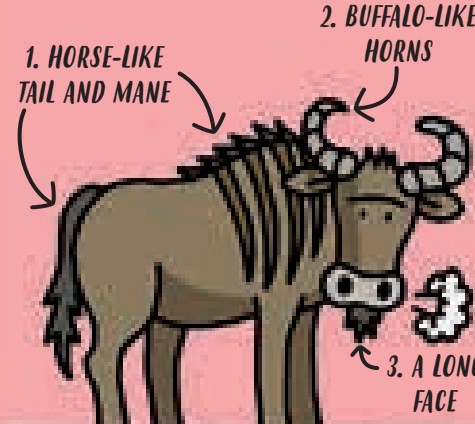
GNUS ON TOUR

I thought we were wildebeest?



Also correct!

We are ONE type of antelope with TWO names and THREE important features.



1. HORSE-LIKE TAIL AND MANE

2. BUFFALO-LIKE HORNS

3. A LONG FACE

Over a million gnus trek across Tanzania and Kenya every year in search of fresh grass to eat. Our herd includes many other four-legged pals that come along for the ride.



ZEBRA

GAZELLE

EVERYONE KEEP A LOOK OUT!

Sadly, some of our four-legged enemies tag along, too.



YUM

Crossing rivers can be a pain ...



WATCH OUT FOR CROCS, DREW

DREW?

Even baby gnus migrate. They are able to walk within a few minutes of being born.



WAIT FOR ME, MUM

And wherever we go, we always leave behind LOTS of poo ...



POO OUT

GRASS IN

... much to the delight of other creatures.

WE'RE POO MILLIONAIRES!



A DAY IN THE LIFE OF A ...

CLOUD

This is a bit high up for you isn't it? I don't normally get people coming up to see me.



There's the odd aeroplane, hot-air balloon, other clouds ...



Orr! Don't fly right through me! Clouds don't grow on trees you know.



In fact, I formed when the sun heated the ground and the ground heated the air above it.



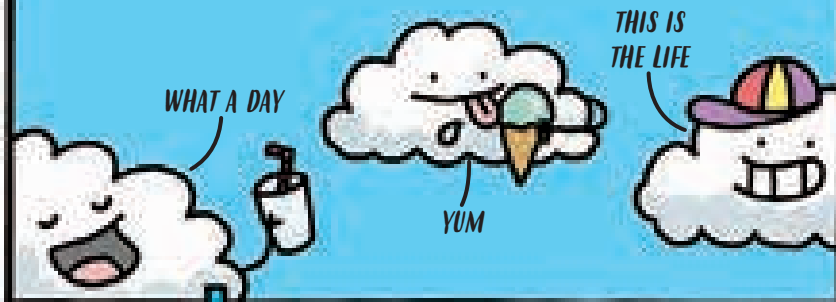
That warm air rose in a process called convection ...



... The air cooled and water vapour in the air condensed to form me, a 'cumulus' cloud.



Cumulus clouds occur at heights of around 400-1,900 m, and are a sign of fair weather.



Cumulonimbus are thunderclouds, which can produce hail, thunder and lightning. They look VERY scary.



But I can change and grow very quickly ...



... To become a cumulonimbus - the 'king of clouds'.



THE BIGGER PICTURE

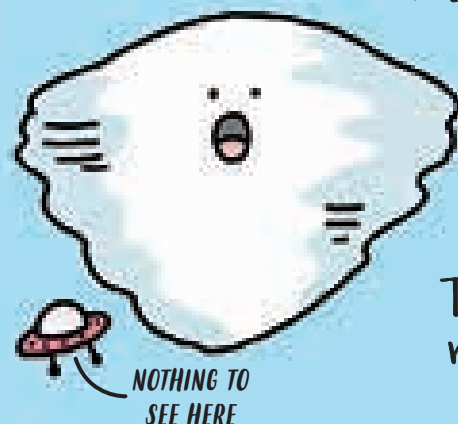
CLOUD SPOTTING

There are many different types of cloud. They each form at different heights in the atmosphere, and only a few produce rain, hail or snow.



CIRRUS

Wispy, high-level clouds of ice crystals. Clouds that resemble these have also been spotted on Mars.



LENTICULAR CLOUDS

Disc-shaped clouds. These are sometimes mistaken for UFOs.

NIMBOSTRATUS

Low-lying, dark clouds. These produce rain and snow.



CUMULONIMBUS

An average rain cloud can hold about 400 tonnes of water - up to three times the average weight of a blue whale.

