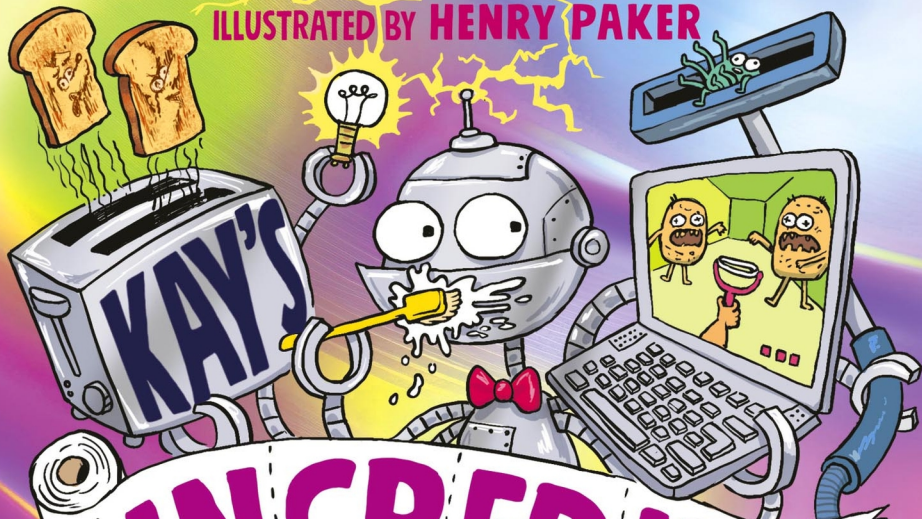




'FULL OF LAUGHS' SUNDAY TIMES

ADAM KAY

ILLUSTRATED BY HENRY PAKER



INCREDIBLE

INVENTIONS

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**A FASCINATING AND FANTASTICALLY FUNNY GUIDE TO
THE INVENTIONS THAT CHANGED THE WORLD***

***AND SOME THAT DEFINITELY DIDN'T**

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KAY'S INCREDIBLE INVENTIONS

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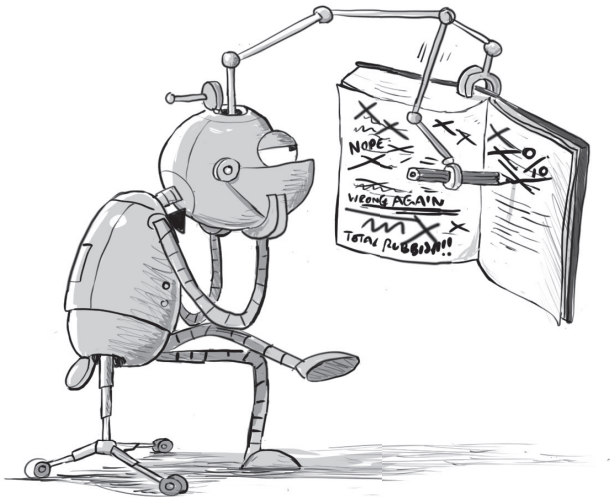


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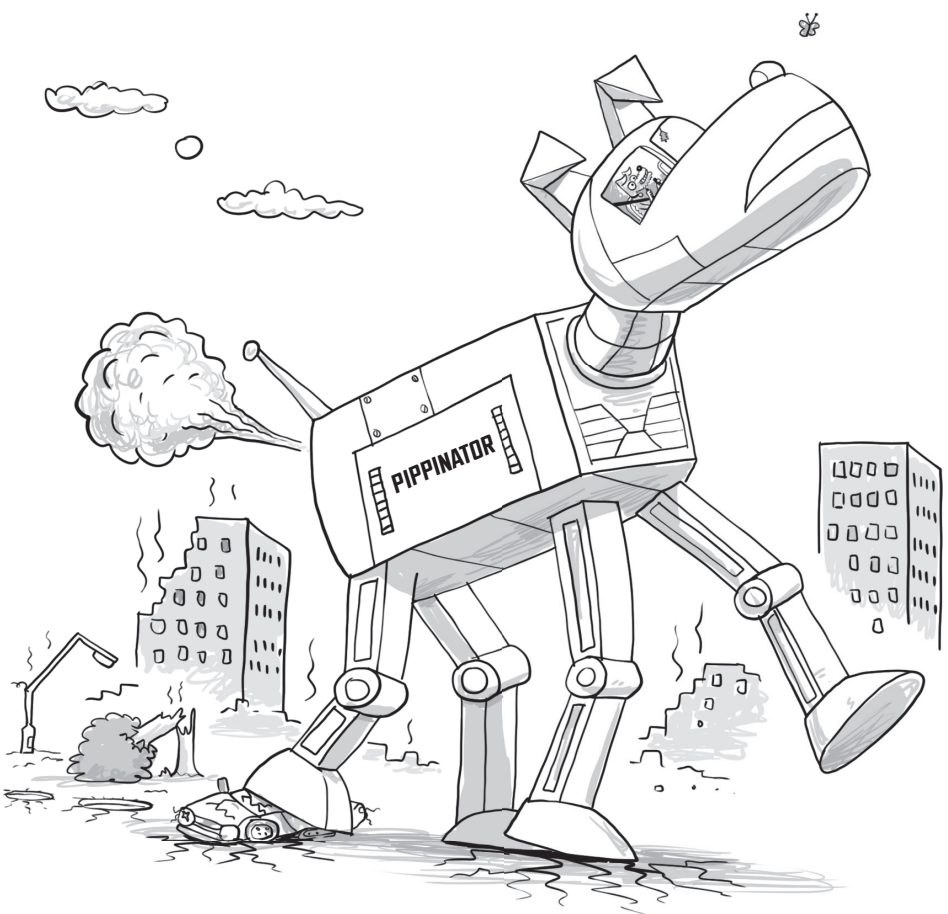
*This book is dedicated to BUTLERTRON-6000,
my robot butler, for providing a fact check throughout.*

*It is also dedicated to me, Adam Kay,
the greatest inventor of all time.*

⚡ Fact check - this is completely inaccurate. ⚡



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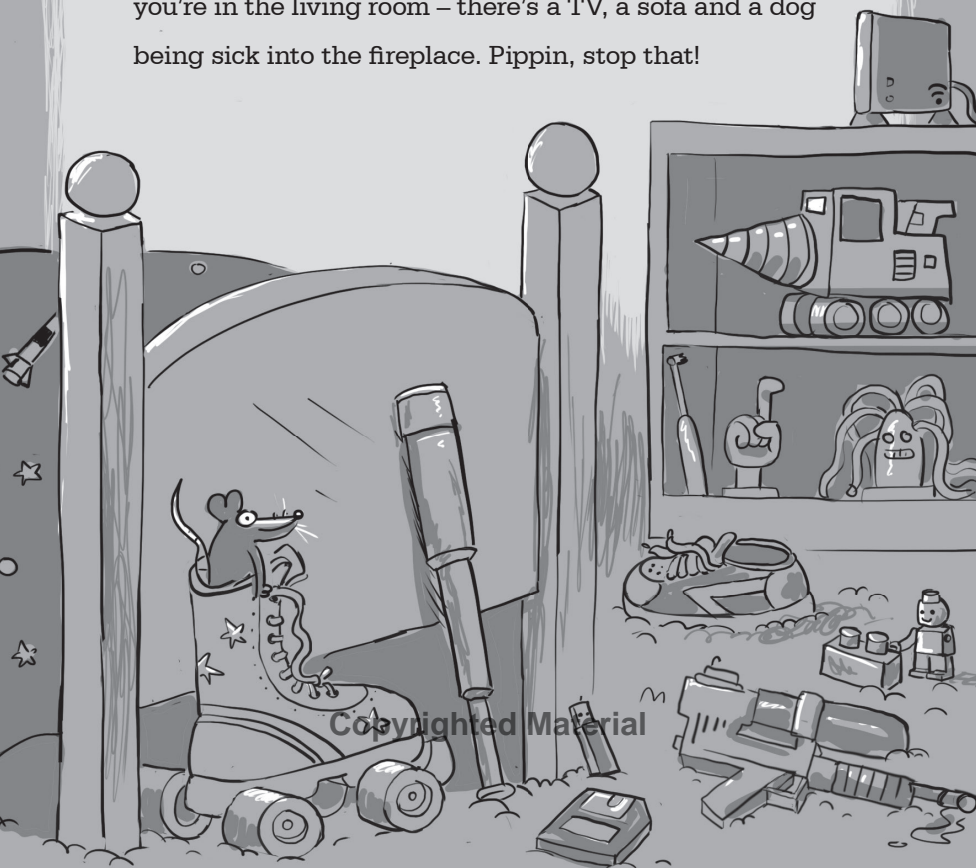
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INTRODUCTION

Take a look around you. What can you see? Maybe you're in the bedroom – there's a light above you, an alarm clock next to you, a duvet on top of you and a bed underneath you. ➤ **Fact check - readers are statistically more likely to read this book on the toilet.** ⚡ Perhaps, like me, you're in the living room – there's a TV, a sofa and a dog being sick into the fireplace. Pippin, stop that!



KAY'S INCREDIBLE INVENTIONS

Did you ever wonder where this stuff around you all came from? No, not from Amazon. I mean, who was the first person to have the amazing idea of making a mobile phone or the annoying idea of building a school? Everything around you that doesn't twinkle in the sky or grow or woof or fart was invented by someone. Like the scientist who invented the microwave by accident, the teenager who came up with the trampoline and the genius behind Smell-O-Vision.

We'll meet the queen who did the first poo on a toilet, hear about the light bulb made out of beard hair and learn why margarine used to be full of maggots. You'll find out why Ancient Greeks wiped their bums on dinner plates, why the Hoover was almost called the Spangle, why the first submarine was built out of leather and grease, how Velcro was invented by a dog, why a whole country was banned from eating sausages so they could make planes and how a movie star invented Wi-Fi (no, it wasn't Zendaya).

I'll also tell you about the most important inventor of all time . . . me. As well as inventing the world's first robot

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INTRODUCTION

butler, the BUTLERTRON-6000, I am the mega-brain behind Coriander Custard and the Ultimate Underwater Piano, plus over eight thousand other equally brilliant inventions, which you can order directly from my company Adam Kay Genius Enterprises Limited.

⚡ Fact check - you spelled 'genius' incorrectly. ⚡



KAY'S INCREDIBLE INVENTIONS

If any of that sounds interesting, read on! And if it doesn't, you should put this book down and read some old rubbish instead, like *My Favourite Types of White Paint* by Gerald Humbum. ➡ **Fact check - *My Favourite Types of White Paint* is a superior and much more popular book.** ⚡



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PART ONE

AT HOME

**LIGHT BULBS,
LASAGNE AND
LOO ROLL**

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THE BATHROOM



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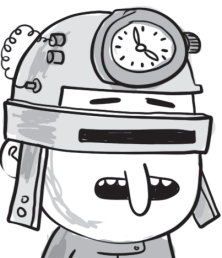
Let's start with the only room in the house where it's totally fine to sit down and poo – the living room.

↘ **Fact check - the bathroom.** ↙

Attention, any time-travellers reading this book from one hundred years ago: the bathroom is a room in houses these days where people can poo and brush their teeth and have a bath.

Attention, any non-time-travellers reading this book: I had to explain that because the bathroom is a pretty recent invention. In this chapter I'm going to tell you who we have to thank for the fact we don't have to wee in the garden any more. Or who to blame, if you like the idea of weeing in the garden.

Also attention, any time-travellers reading this book from the future. Please can you tell me if my dog, Pippin, will ever stop pooing in the dishwasher? Will the Octopus People of Zaarg be kind to humans when they take over Earth in the year 2185? Oh, and what are next week's lottery numbers, please?



THE NUMBERS ARE 2, 15... UMM...
I REALLY SHOULD HAVE WRITTEN
THEM DOWN. SORRY.





STRANGE BUT POO

Toilets have been around for as long as bums have, which is ages. Poos and wees don't smell great – unless you're Pippin, in which case they're a delicious snack. And that's why people have always been keen to get them away from their houses. In Ancient Rome, two thousand years ago, people would visit public toilets. So far so good. About twenty people would sit on a long bench with holes cut into it and poo into a pit underneath, while they chatted to each other about where they were going on their holidays and where they bought their togas. So far so terrible.

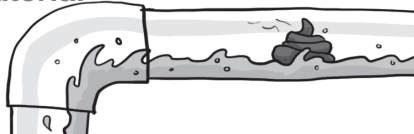
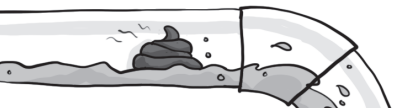
Until about six hundred years ago, people pooped out of the window quite a lot – either straight out, or into a poeey pot first. If you lived in a castle, then it would splat into the moat, which the fishes can't have liked very much. But if you lived in a tall building, it would just land on the street. Luckily for the people walking underneath, umbrellas had already been invented. (My lawyer, Nigel, has asked me to mention that it is both illegal and disgusting to poo out of your window.)



A ROYAL FLUSH

It's difficult to know what present to buy for a king or a queen. A diamond necklace for their corgi, maybe? A massive rubber duck to put in their moat? Four hundred years ago, John Harington had this exact problem – it was made even worse by the fact that Elizabeth I was his godmother, so he really didn't want to mess it up. Apart from anything else, she was a big fan of chopping people's heads off.

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KAY'S INCREDIBLE INVENTIONS

UNIVERSAL
RATING FOR
INVENTION
NAME (URIN)

8/10

VERY
FUTURISTIC

But John had a great idea. He'd just invented the first-ever toilet you could flush and named it the Ajax. He thought old Queenie would really like a massive toilet as her present, so he had one built in Richmond Palace. Elizabeth loved her amazing new toilet, and she did some of her favourite poos in it. ➔ **Fact check - there is no evidence that Queen Elizabeth I had any favourite poos.** ⚡



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ROOM FOR IMPROVEMENT

The palace privy didn't really become popular (except with Queenie) because people didn't have water pipes going into their houses back then, so after every royal wee a bunch of servants would have to go to a well, fill up three big buckets, then carry them upstairs and splash them into the toilet. I don't know about you, but I don't have three servants – I've only got a robot butler and he doesn't obey any of my instructions. ⚡ **Fact check - I have actually obeyed almost four of your instructions in the last ten years.** ⚡

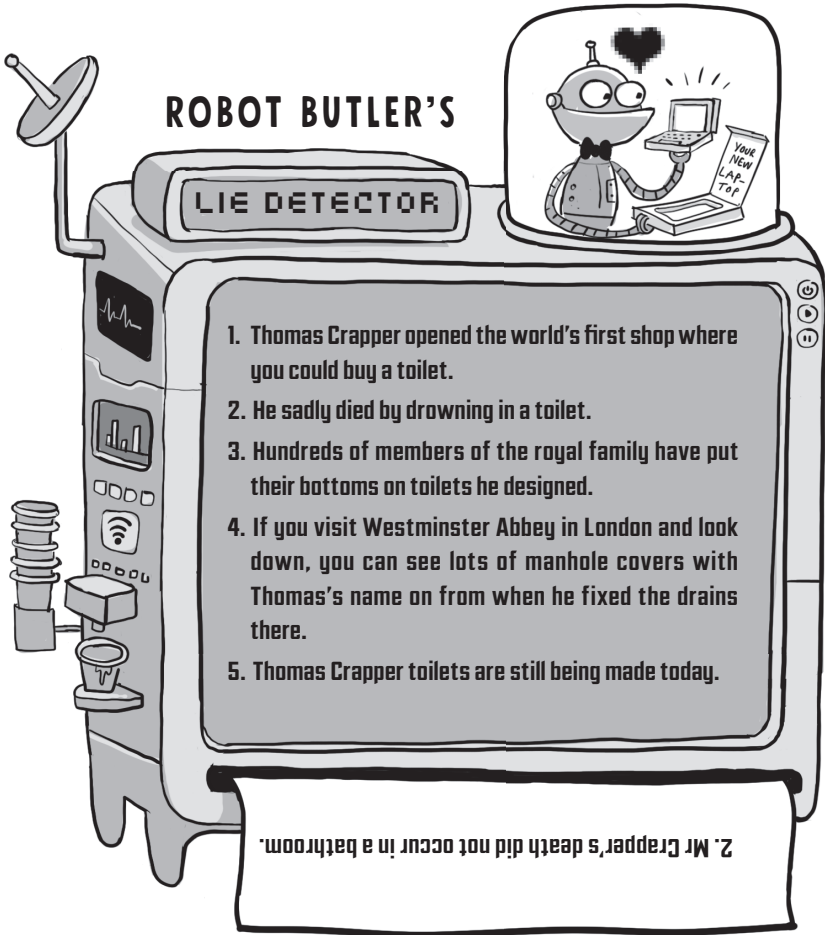
Before long, the toilet situation became quite urgent, because people were getting ill from all the brown stuff that was plopping straight into the rivers and then their drinking water. First on the to-do list was getting some sewers – great big underground pipes to safely whizz away everything that came out of people's toilets. And then, gradually, lots of improvements to toilet technology started dribbling through like drops of diarrhoea. One of the biggest improvements was thanks to a man who had absolutely nothing remotely funny about his name, Thomas Crapper.



KAY'S INCREDIBLE INVENTIONS

In 1880, the toilets in people's houses absolutely stank. I know, I know – toilets these days don't exactly smell like freshly baked bread . . . but this was a thousand times worse. The stink fumes from the sewer would rise straight up through people's toilets and make the bathroom smell like Godzilla had been in there after eating a cauldron of chilli. The solution came from Thomas Crapper, who absolutely didn't have anything named after him – I don't know what on earth you're thinking. His invention was called a U-bend, and if you look behind your toilet you'll see that we still use them today. If the pipe that goes out of the toilet is shaped like the letter U, the smelly fart-gases can't escape from the sewers and knock people unconscious. If you look inside your toilet – no, not in the toilet bowl; I mean inside the bit on top where you flush it – you'll see a floating ball on a stick. This is called a ballcock and is another one of Tommo's inventions, which stops too much water flowing in and causing a flood. (My lawyer, Nigel, has advised me to mention that you should get an adult to help if you want to look inside your toilet. He's far too busy to be sued because people have broken thousands of toilets after reading this book.)

Now, let's ask my robot butler to activate his lie detector to see if you can guess which Thomas Crapper fact is a total pork pie. (That's rhyming slang for 'lie'.)



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BACK TO THE POOTURE

If you're happy to spend more money on a toilet than I spent on my car, then these days you can get one with the following features:

- Adjustable height
- Bluetooth speakers (I'd have called them Poo-tooth speakers, personally)
- A heated seat
- A jet of water to wash your bum
- Different coloured lights
- A bum dryer
- Time travel

⚡ Fact check - no toilet is currently capable of time travel. ⚡

TINA AND HER TERRIFIC TIME-TRAVELLING TOILET!



Maybe it's just me, but if I had spent ten thousand pounds on something, then I probably wouldn't want to poo on it.

LOO GOTTA ROLL WITH IT

Loo roll was invented by a woman called Lou Roll, who – **Fact check - my quality-control module suggests you should start this section again.**

OK. Loo roll has only been used in the Western world for about one hundred and thirty years, and I'm fairly sure you'll agree that people have been pooing for longer than

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KAY'S INCREDIBLE INVENTIONS

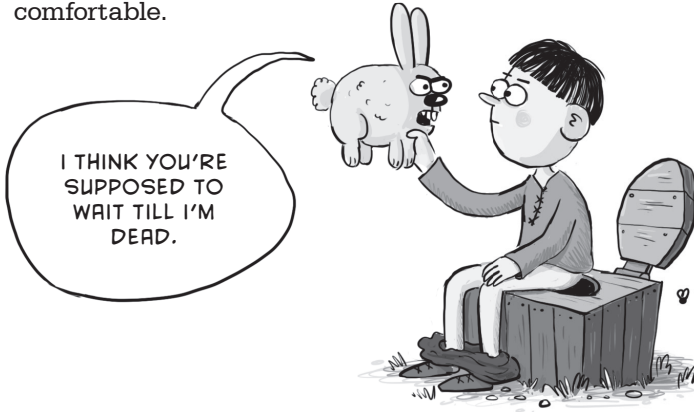
that. So what was everyone using until then? Well, after the Ancient Romans had finished sitting on their big long toilet benches chatting to each other, they would grab a sponge on a stick and clean themselves up. And then the next person would take the same sponge on a stick and use it. And so would the next person . . . and the next person . . . Now is probably a good time to let out an enormous sigh of relief that you don't live in Ancient Rome.



And in Ancient Greece, if there was someone you really didn't like, you could get their name written on a dinner plate and then use that every time you went to the bathroom. When pootery went out of fashion, people

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would use pretty much anything they could get their hands on – leaves, grass, animal skins and even corn on the cob, which doesn't sound like it would be particularly comfortable.



In China, they sussed out the whole toilet paper idea about seven hundred years ago, but it took a lot longer for it to reach Europe or America. Back then, the Chinese would use sheets of paper in a box, a bit like printer paper. I just hope nobody got a paper cut . . . The first actual roll arrived in 1857 in America, and I'm pretty sure people started arguing about whether you should fold it or scrunch it up to use it about two days later. I'm #TeamScrunch. In 1952, companies started making coloured toilet paper, so it could match your bathroom or your socks or whatever. The brown colour didn't sell very well, for some reason.

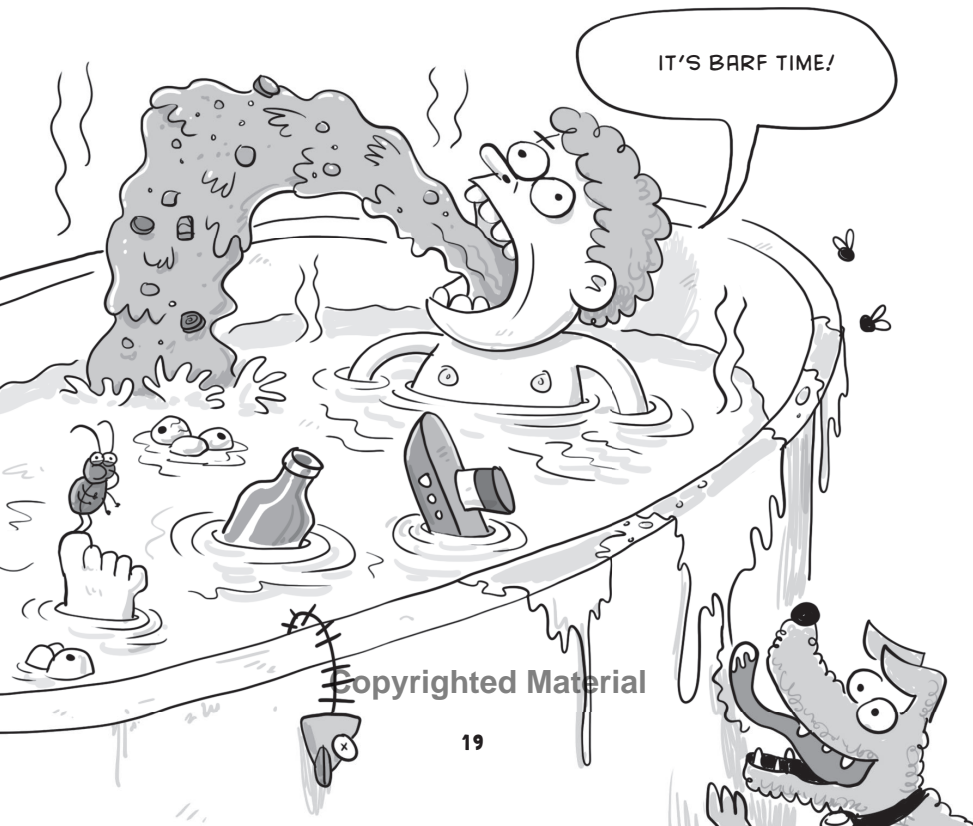
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YOU DO THE BATH

Until one hundred and fifty years ago, houses didn't have bathrooms. You basically had three options. Option one: go to a public bathhouse, which was like a big naked swimming pool with soap and sponges. Option two: keep a metal bath in your garden, and once a week carry it inside, put it next to the fire and fill it up with loads of buckets of water that you've heated up. Because this was a massive faff, everyone would take turns using the bath one after the other, from the oldest member of the family to the youngest. So you'd better hope that Grandpa doesn't like weeing in the bath. By the time the youngest person got into their disgusting weekly bath, the water would be so brown and murky that they couldn't even see their own toes. Option number three was to just stay stinky. This is Pippin's preferred method. ⚡ Fact check - and yours. ⚡

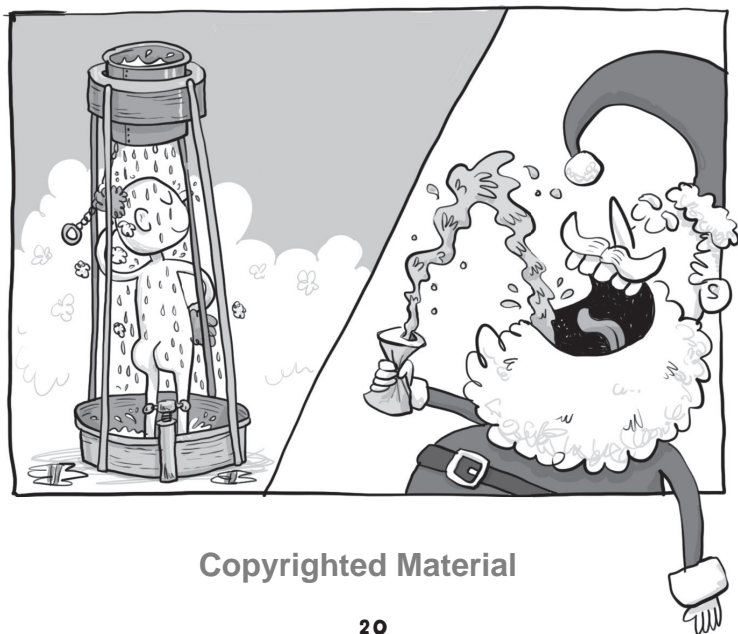


When people started getting water delivered directly to their houses (by pipes, I mean, not the postman), they finally bought baths with taps. These were often clawfoot baths with those funny little feet that make it look like a lion got cursed by a witch and turned into a bath. We used to have a bath like that, but Pippin thought it was an actual animal and would woof at it so much that we eventually replaced it with a normal tub. I don't think she's the cleverest dog in the world, to be honest.



THE SHOWER AND THE GLORY

William Feetham was famous for having feet made out of ham. ➤ **Fact check - William Feetham was famous for inventing the first-ever shower.** ⚡ The first-ever shower looked more like a big wooden wardrobe that you stood inside. Instead of fiddling with dials and knobs, you would just pull a big chain and a trap door would open above you and a huge bucket of water would fall straight onto your head in one go. Here's a diagram of how it worked, plus a picture of a Santa drinking some Fanta if you'd prefer to look at that instead.

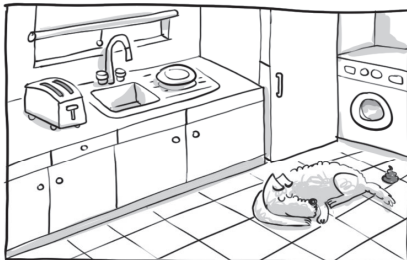


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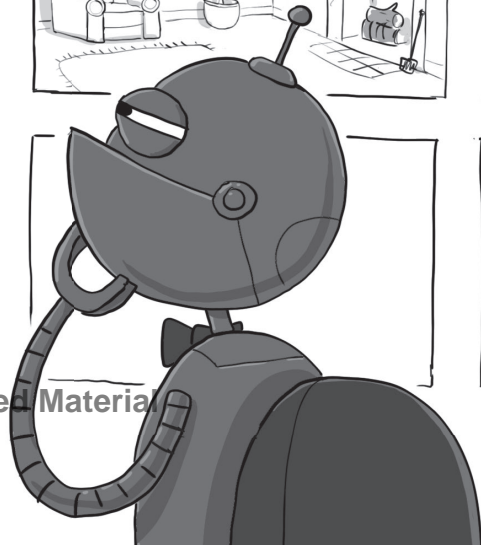
THE BATHROOM

Because one splosh isn't enough for a shower, you'd then turn a big handle, which would pump the water back above your head. And then repeat. This did mean that every time you pulled the chain, the water was colder and dirtier than last time, which wasn't ideal. Also, it meant you couldn't wee in the shower, because soon afterwards it would be landing on your head. I should point out that I never wee in the shower.

⚡ **Fact check - you actually always** - ⚡ Oh dear, we've run out of space.



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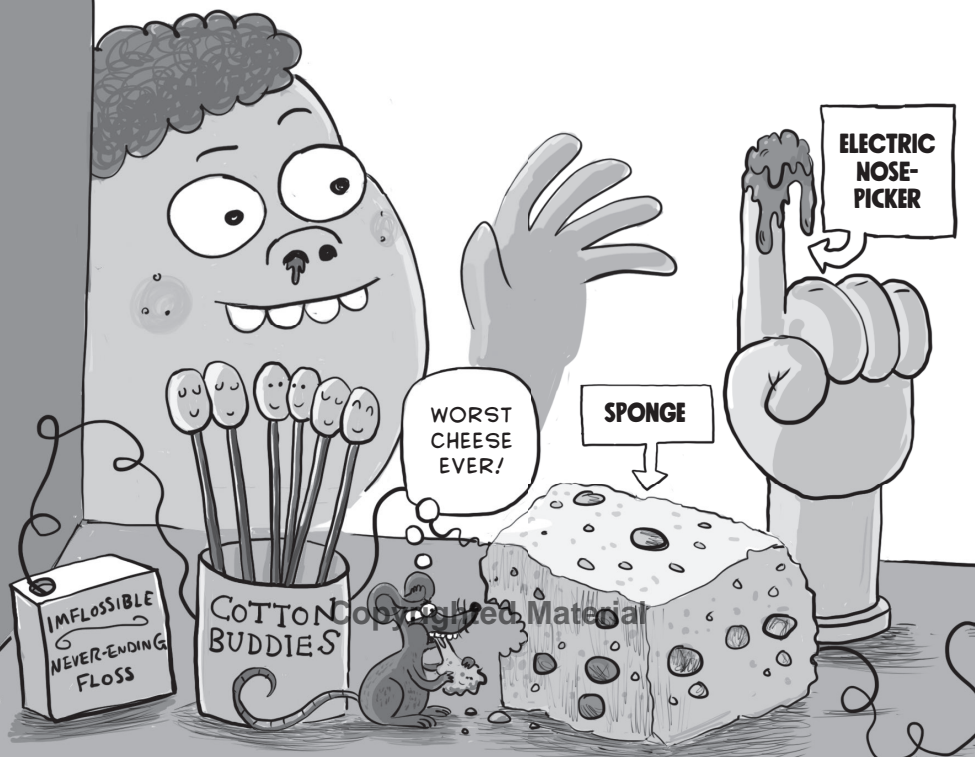


MEMBERS OF THE CABINET

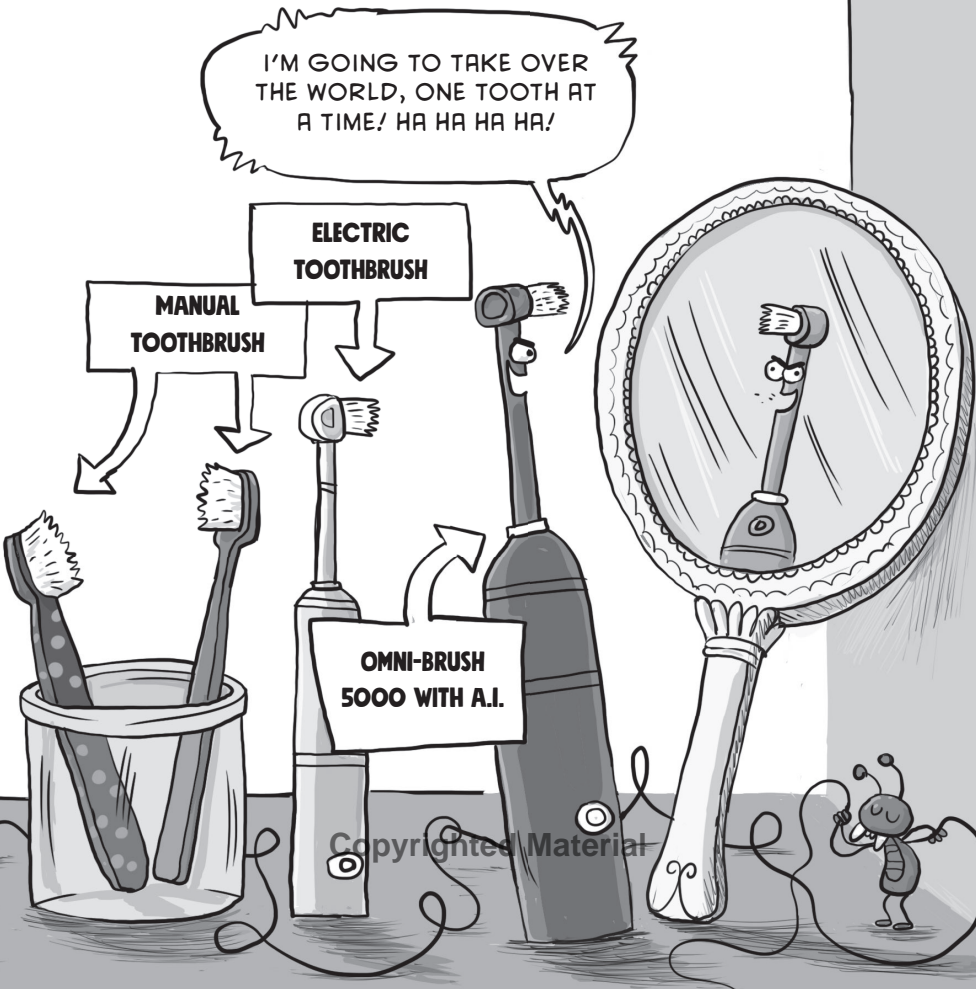
Let's have a quick look at the various lotions and potions and gadgets and gizmos inside your bathroom cabinet.

TOOTHBRUSH

Humans have known for thousands of years that if they didn't clean their teeth, then they'd crumble like chalk. Their teeth would crumble, I mean, not their whole bodies. Even inside the pyramids, archaeologists found twigs that pharaohs used to brush their teeth. (Although



I guess they might have just been twigs that fell in there from a tree.) The first toothbrush that you'd recognize today was made by an English bloke called William Addis. He had been sent to prison in 1770 for starting a riot, and one night he sneaked a bone from his dinner into his cell, then stuck a load of bristles from a pig into



KAY'S INCREDIBLE INVENTIONS

one end of it, and used it to clean his teeth. Nope, I've got no idea why there was a pig hanging around in prison either.



When Wills got out, he opened a toothbrush factory – and that company, Wisdom, is still producing millions of toothbrushes over two hundred years later. I'm pretty sure they don't make them out of bones and pig-bum-

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bristles any more. ⚡ **Fact check - you are correct, for the first time in this book.** ⚡

The first electric toothbrush was invented around seventy years ago, in 1954, by an excellently named scientist: Dr Philippe Guy Woog. He called his invention the Broxodent, which was basically French for BrushyTeeth. I might start calling toothbrushes that now, actually.



UNIVERSAL
RATING FOR
INVENTION
NAME (URIN)
9/10
GREAT
IMPROVEMENT.

TOOTHPASTE

If you've ever moaned about using a BrushyTeeth, think how much moanier you'd be if you'd lived in Ancient Egypt. You would be cleaning your teeth with a mixture of crushed-up bones, old eggshells, wee, hooves and spices. Even two hundred years ago, things weren't much better – people would use a mixture of soap and crushed-up toast on their BrushyTeeth. The first toothpaste that looks like the stuff we use today came out in the 1870s, thanks to a dentist who was named after two cities, Washington Sheffield. His toothpaste was white and minty, came in a tube and worked a lot better – everyone was much happier. Except perhaps the tooth fairy.

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DEODORANT

It's time to stink about, sorry, *think* about body odour. Back when people lived in caves, nobody really cared about a bit of armpit stench, because they mostly concentrated on not getting eaten by some horrible creature with loads of claws and fangs. In fact, a bit of a pong might have helped them – what animal wants to eat someone who smells like a glass of milk that's been left in a hot car for ten years? The Ancient Egyptians were the first people to come up with a kind of deodorant: they smeared porridge on their armpits. Maybe they thought it was better to pong of porridge than stink of sweat?



Then about one hundred years ago a woman called Edna Murphey invented something that actually worked! Her dad was a doctor who wanted to stop surgeons getting sweaty hands and accidentally dropping their scalpels into people's hearts. I would like to reassure any former patients of mine reading this that I never accidentally dropped a scalpel into their heart.



Together, Edna and her dad developed a liquid called Odorono, which worked, and she started selling it to anyone who had an armpit. It wasn't totally perfect. It was so acidic that it burned through people's clothes (including one woman's wedding dress – oops). But it was the start of an industry that's now worth more than ten billion pounds a year, and means that people don't faint from the stink every time they get on a busy bus.

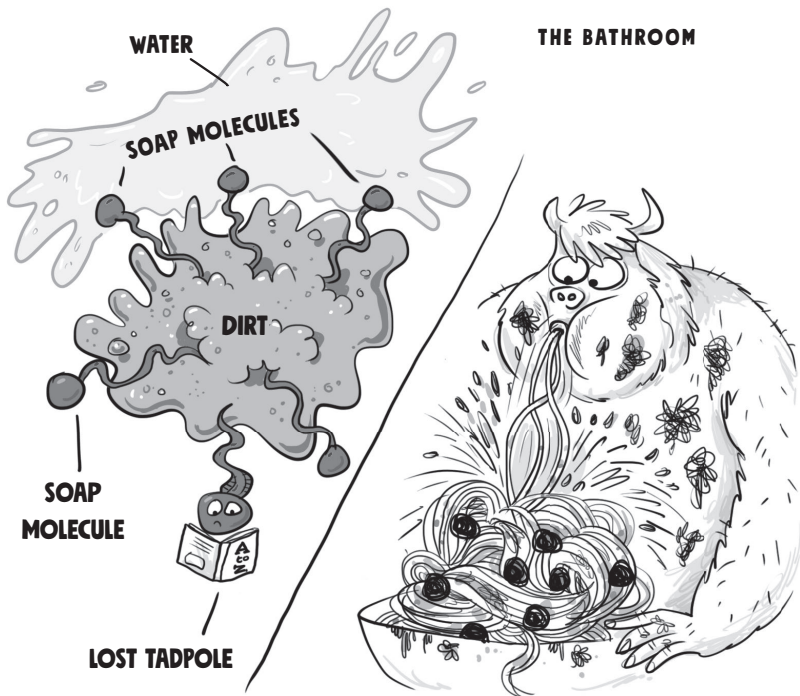
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Do you want to learn about soap? Or would you lather not? ⚡ **Fact check - my joke-assessment module informs me that this has a 3% humour level.** ⚡

People have been making soap for about five thousand years. I think my Great Aunt Prunella still has some of that original stuff in her bathroom. Early soaps were made out of a mixture of animal fat and ash, which sounds like it would get you even dirtier. Early *soups* were made out of leek and potato. If you took a microscope and peered at a molecule of soap, you'd see that it looks a bit like a tadpole – one end of it loves water and the other end of it loves oil. Germs and dirt get mixed in with the natural oils on your skin, and when you put soap on, the oil-loving bit joins to it. And then, when you wash your hands, the water-loving bit of soap jumps over to the water, taking the germs and grease and gunk with it. Here's another diagram, and an alternative picture of a yeti eating spaghetti.

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FACE CREAM

If you wanted to take care of your skin in Ancient Rome, there were various options available, such as smearing your face with goose fat, crocodile poo, gladiator sweat, urine or poisonous lead. I think I'd have just splashed my face with water, to be honest. Things got slightly better four hundred years ago, when face creams were made of things like lemon juice, egg whites and rhubarb – although that does sound more like a recipe for a meringue to me. But face creams as we know them

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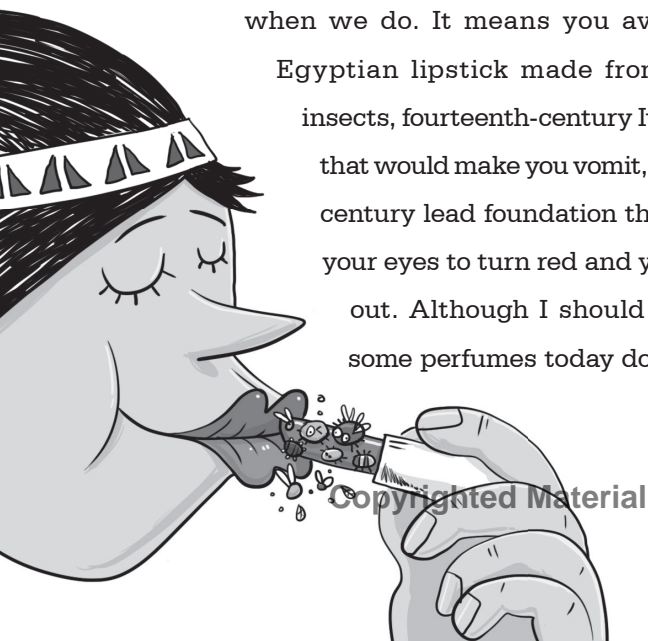
KAY'S INCREDIBLE INVENTIONS

today are all thanks to a woman called Helena Rubinstein. Helena moved from Poland to Australia in 1896, when she was twenty-six years old, and started making face creams like the kind her mother used to make back home. To say these creams became popular is a bit of an understatement – not long afterwards she had sold so many that she became the richest woman in the entire world! I put on a face cream every single morning without fail, and that's why I look like a movie star.

⚡ **Fact check - my image-assessment module informs me that this is correct. You have a strong visual similarity to King Kong.** ⚡

MAKE-UP

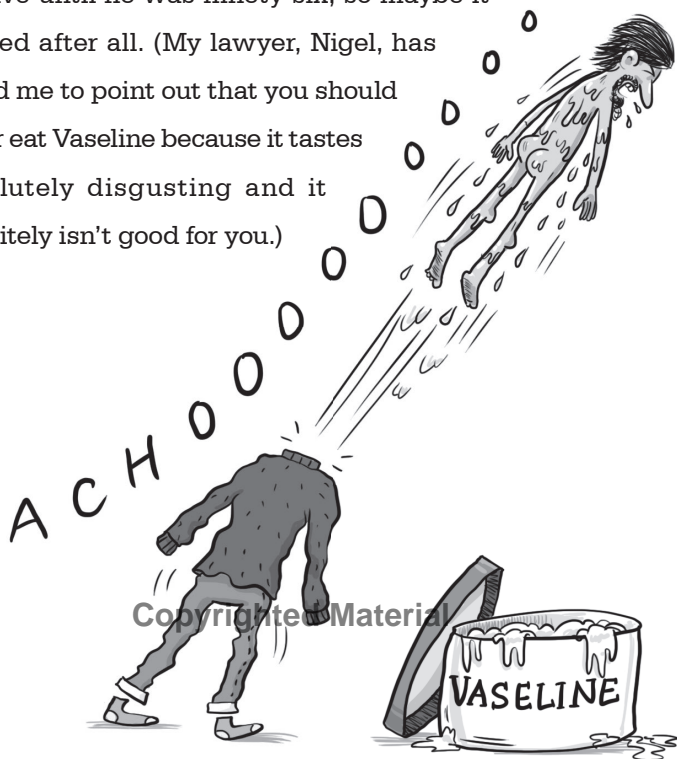
All I can say is be very, very grateful that we live when we do. It means you avoided Ancient Egyptian lipstick made from squished-up insects, fourteenth-century Italian eye drops that would make you vomit, and eighteenth-century lead foundation that would cause your eyes to turn red and your teeth to fall out. Although I should warn you that some perfumes today do still use whale



vomit. ⚡ **Fact check - this is correct.** ⚡ That's why it's always best to read the label . . .

VASELINE

I don't know if you've ever used Vaseline for dry skin or scrapes and scratches. It was invented in 1872 by Robert Chesebrough, who made it out of petrol. RobCheese thought it was the cure for everything and when he got a chest infection he would cover himself in Vaseline from head to toe. He also ate a spoonful of it every day because he thought it was good for you. Yuck. Although he did live until he was ninety-six, so maybe it worked after all. (My lawyer, Nigel, has asked me to point out that you should never eat Vaseline because it tastes absolutely disgusting and it definitely isn't good for you.)



TRUE OR POO?

BATHROOM MIRRORS USED TO COME FROM THE INSIDE OF A VOLCANO.

TRUE These days mirrors are made of glass with some shiny stuff sprayed onto the back, but what did you do thousands of years ago if you wanted to check out your cave quiff? Well, unless you had a pond you could spy your reflection in, you would polish up a bit of rock and look in that. The shiniest rock was called obsidian – and the only problem was that you had to get it from a volcano. I hope somebody had invented oven gloves.



AAAGH, THIS HURTS SO MUCH!
BUT MY TEETH LOOK AMAZING.

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A BATH USES MORE WATER THAN A SHOWER.

TRUE It's important to think about how much water we're using – for the environment, and also to save money. Unless you sing the complete works of Adele every time you take a shower or get in a bath the size of a bucket, you'll use less water by having a shower. I save water by using the bath straight after Pippin has been in. ⚡ **Fact check - this explains your unusual odour.** ⚡

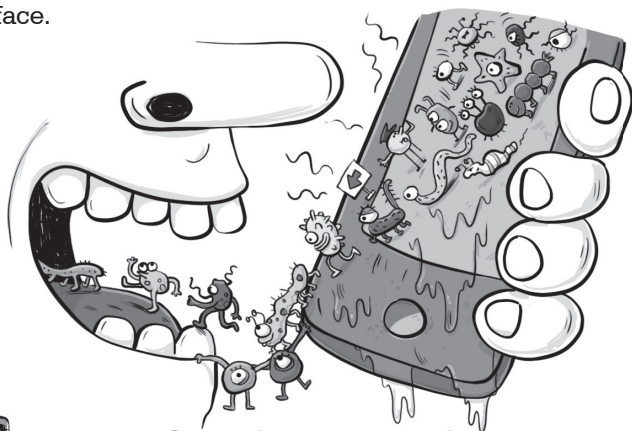
THERE IS A TOILET-BASED THEME PARK IN SOUTH LONDON.

POO Sorry if you were planning a day out. But if you're prepared to travel a bit further, you can visit the world's only toilet-based theme park in South Korea. It was founded by a man called Sim Jae-duck, who was born in a toilet, and devoted his entire life to toilets. He was even known as 'Mr Toilet' (although I think 'Toilet Duck' would have been a better nickname). He lived in a house shaped like a giant toilet, and in 2012 he turned it into a theme park full of hundreds of toilets. You could say . . . he was absolutely potty about them. That's an excellent joke, by the way. ⚡ **Fact check - my joke-assessment module informs me that this has a 1% humour level.** ⚡

ADAM'S ANSWERS

HOW MANY PHONES GET DROPPED INTO TOILETS EACH YEAR?

In the UK about two million people accidentally drop their phones into the toilet every year. If you do this yourself, then dry it out immediately by putting it in a bowl full of rice. And if you accidentally drop a load of rice into the toilet, then dry it out by putting it in a bowl of iPhones. (My lawyer, Nigel, has asked me to point out that you should do neither of these things.) If you know someone who takes their phone into the bathroom, you should tell them that it becomes absolutely covered in all sorts of horrible germs . . . and then they hold it up to their mouth. They might as well smear a poo on their face.



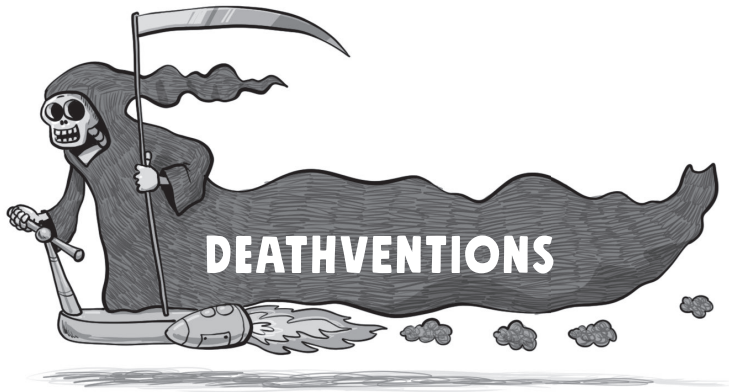
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WHY IS THE CITY OF BATH CALLED BATH?

If you go to the very centre of Bath, you'll see there's a giant plughole called the Mighty Drain, where all the water flows away after it's been raining. And on the side of the town hall there's a great big tap that all the residents use for drinking water. There's even an ancient yellow sculpture on top of nearby Solsbury Hill called Ye Olde Rubber Duckie and – ➔ **Fact check - every single word of this is incorrect.** ⚡ I'll try again. Bath is called Bath because there are natural jets of hot water that come from really deep inside the earth, so Romans would go there to swim because it was like a lovely hot . . . bath! Sadly there isn't a city called Shower where there's always loads of nice warm rain.

HOW MANY OF US WASH OUR HANDS AFTER GOING TO THE TOILET?


I'm pleased to say that three out of four people wash their hands afterwards. But that means I'm also totally disgusted to say that one in four people don't. I'm just thinking of all the people I've ever shaken hands with in my life – a quarter of their hands had wee on them. I'm suddenly not feeling particularly hungry.



It's a dangerous business being an inventor, especially if you're a totally useless one. Here are some inventors who ended up splatted, exploded or otherwise deaded by their own discoveries. In case it isn't clear, the moral is . . . DON'T TRY THIS AT HOME! (My lawyer, Nigel, would like me to emphasize this very strongly.)

BIRD SUIT

In around 1010 (that's the year 1010, not ten past ten in the morning), a man called Ismail ibn Hammad al-Jawhari decided that flying didn't look particularly difficult. After all, birds and wasps could do it, and they're idiots. So he climbed onto the top of a tall building, strapped some wings made of wood and feathers onto his arms, jumped off the roof and started flapping. What do you think happened next? Well, I can tell you what didn't happen – he didn't fly.



NOT AS EASY AS IT LOOKS, IS IT?



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