

# VIKING MIDDENS & A HISTORIC POO

When Vikings lived in Jorvik (present day York, UK) they threw everything they didn't want into one nasty pile known as a midden. When archaeologists stumbled upon it 1,000 years later, it was still stinky! They knew it would tell them a lot about the past.

## SUCH A DUMP

The Jorvik midden was next to a river called the Ouse. Before all the rubbish decayed, wet soil "mummified" and preserved it instead! Here are some of the things that got buried.

42 horse bone ice skates

Amber jewellery

250,000 pieces of pottery

Rare sock

Silver coins

Antler comb

1,700 leather shoes

Padlock and key

Ivory board game

## POO... OR TREASURE?

The midden contained the biggest fossilised human poo ever discovered. It revealed that Vikings' bodies were infested with thousands of itchy parasites, including worms that wriggle out of your nose and eyes!

"AS PRECIOUS AS THE CROWN JEWELS!" - BONE JONES, ARCHAEOLOGIST

## DIGGING IT UP

When archaeologists dug up the Jorvik midden, the smell was horrendous! But they kept on digging because the things they found were amazing: 40,000 mummified objects!

DID SOMEONE FART?

# POO PARTIES

Does poeing have to be a solitary thing? Most of us spend more than 90 minutes each week on the toilet. That adds up to about 256 days of our lives! As a result, some cultures decided that toilet time was better spent together.

## ANCIENT ROME

Two thousand years ago, the Romans built some fancy public toilets. You could sit and chat with the whole town in a 60-seater loo! Running water underneath swished poo and wee into a nearby river or ocean. It seemed like the perfect toilet, but sea creatures knew how to swim upstream...



Historians found ancient graffiti on the walls, such as "Cacator cave malum" ("Pooer beware").

CACATOR CAVE MALUM!

Scented candles masked the smell.

OKAY, ALL DONE. NOW YOU CAN USE THIS SPONGE!

There are stories of sea snakes biting people's bums through the toilets, and once even an octopus emerged!

Before using shared sea sponges to wipe their bums, Romans would stick the sponges in the little trough of water by their toes to "clean" them.



## THE WILD WEST

Cowboys built all kinds of group toilets. North Americans named them for how many seats they had (two-holer, three-holer, four-holer), Australians called them dunnies, and South American gauchos called them *letrinas*.

Tall sunflowers were planted around the toilets for privacy, so when cowboys had to go, they'd just look around for sunflowers.



The wooden seats were warm, but imagine the splinters!

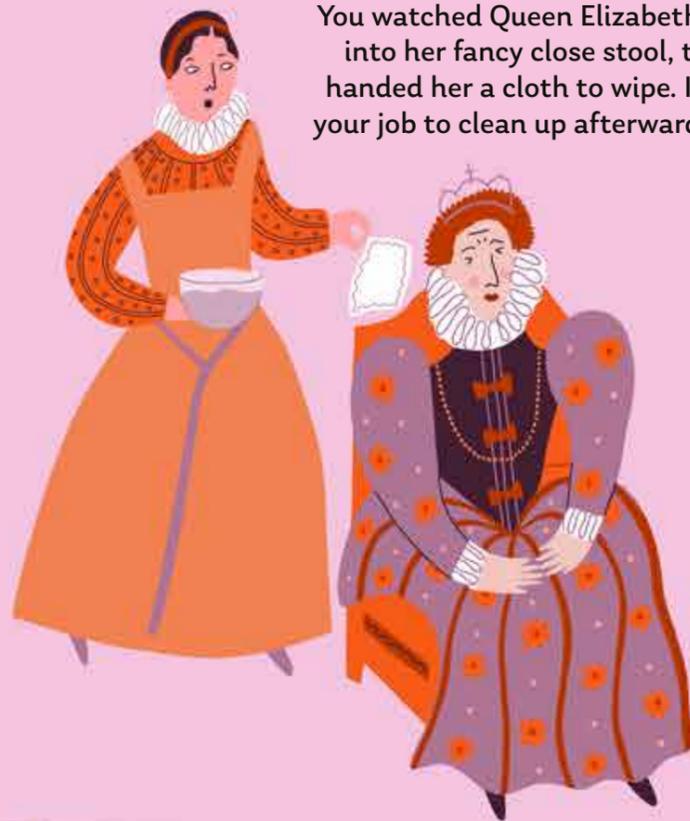
Wise cowboys took sticks with them to sweep for venomous snakes and spiders.

A corn on the cob was the wiping implement of choice.

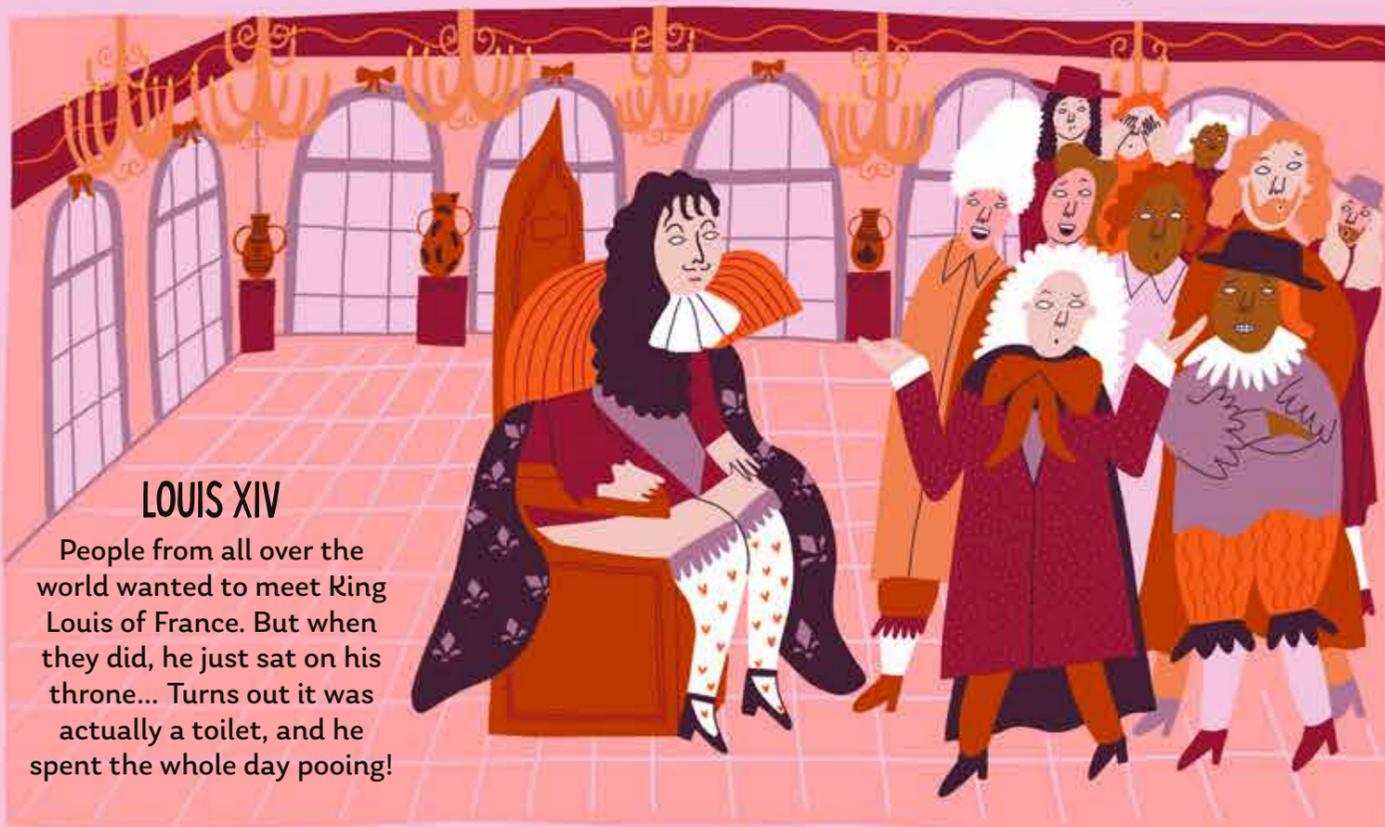
# A ROYAL FLUSH

## THE WORST JOB IN THE WORLD?

One of the top jobs in all of England used to be the Groom of the Stool. You watched Queen Elizabeth I poo into her fancy close stool, then handed her a cloth to wipe. It was your job to clean up afterwards too!



Have you ever thought of your poos as wonderful, precious things? Kings and queens across the world wanted everyone to believe that their poos were as magnificent as they were. Naturally, those special poos called for special toilets – simple privies and shared rooms wouldn't do. Instead, royals did their business in very posh containers called "close stools".



## LOUIS XIV

People from all over the world wanted to meet King Louis of France. But when they did, he just sat on his throne... Turns out it was actually a toilet, and he spent the whole day pooing!

## THE JAPANESE TALE OF THE SHOGUN'S STOOL

This folk story was told to show how much people used to honour shoguns – Japanese warrior kings. Do you think it's true?



Two hundred years ago, a powerful shogun was hunting with his friends in a forest.



"It's that special time, everyone!" he said. But his friends had forgotten his close stool.



He rushed to a nearby village, but those lowly peasants only had privies!



Instead, the shogun walked into the best house in the village hoping for a miracle.



He pulled down his trousers and poeed right in the middle of the floor, then left!



Everyone in the village honoured the poo forever after!

## S-BEND

Scottish inventor Alexander Cumming discovered that keeping water in the pipe by bending it meant that nasty sewer gases couldn't float back up.

I ALSO INVENTED A MUCH BETTER FLUSH!

YES, MY NAME IS CRAPPER. WHY DO YOU ASK?

## U-BEND

Thomas Crapper improved Alexander's S-bend so it wouldn't clog or overflow. He also helped make flushing toilets popular in people's homes.

SURELY NOBODY WILL EVER FORGET TO PUT THIS SEAT BACK DOWN.

## REVEREND HENRY MOULE

Henry invented his earth closet to prevent cholera in poor neighbourhoods. Users pulled a lever to release a layer of dirt that covered and dried out the poo, so the waste could be safely dumped outside later.

SOME FANCY FOLK LIKE MY TOILET BETTER BECAUSE IT'S SILENT!

# BUILDING THE BEST TOILET

John Harrington's Ajax toilet (see page 26) introduced the world to the flush, but it would be another 200 years before the technology really caught on. Once it did, the battle for the title of Best Toilet Inventor was on – and competition was fierce! Across the UK, new inventions were popping up everywhere.

## THOMAS TWYFORD

Another Thomas made two big advances in toilet technology: a hinged seat that could be lifted up and down and an all-in-one-piece porcelain toilet that was much easier to clean.

## GEORGE JENNINGS

George wanted everyone to love toilets like he did. His fancy public toilets at London's Great Exhibition in 1851 were wildly popular – over 800,000 visitors paid to use them.

COME AND SEE THE FUTURE OF POOING!

I'LL NEVER POO IN A HOLE IN THE GROUND AGAIN!

# THE FUTURE OF POO

What will the toilets of the future be like? The truth is, nobody knows for sure. When you look at all the amazing inventions people have dreamed up over the years – from Queen Elizabeth I's close stool to toilets in outer space – one thing is for sure: humans will keep coming up with amazing toilet innovations!

## TOILETS IN SPACE

Astronauts have used all kinds of strange toilets – from simple tube-and-funnel systems that quite literally suck away the waste, to toilets you have to strap yourself into!



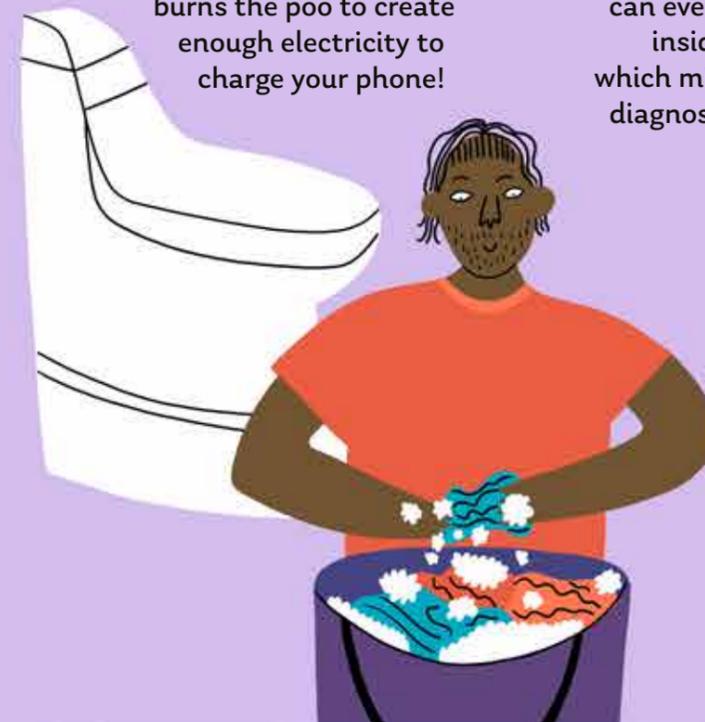
## WEE POWER

When you don't have water pipes or electricity, a toilet that turns wee into power can feel like magic. One invention creates electricity with every flush. Other toilets can power lights for a building – or even a whole village!



## NANO MEMBRANE TOILETS

This amazing invention doesn't need pipes, water, or power. A spinning toilet bowl separates poo from wee, turns the wee into clean water (which can be used to do the laundry), and burns the poo to create enough electricity to charge your phone!



## SMART TOILETS

Smart toilets can recognise different bums and keep track of how long it takes for you to... *ahem...* relieve yourself. They can even tell what's inside each poo, which might help to diagnose diseases.

