

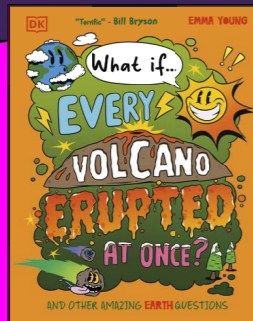
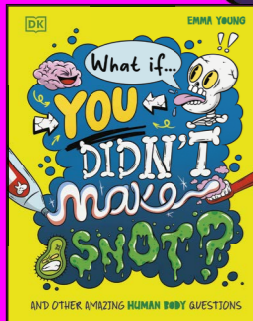
Have you ever wondered what would happen if there were as many lions as ants? Or if a horse had teeth like a tiger? Or even if unicorns existed? Well, you're about to find out!

Join Emma Young on an exploration of nature like no other and discover the answers to 33 humorous questions that will make you think about animals in a whole new way.

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Illustrated by **SUPER FREAK**

Also from DK

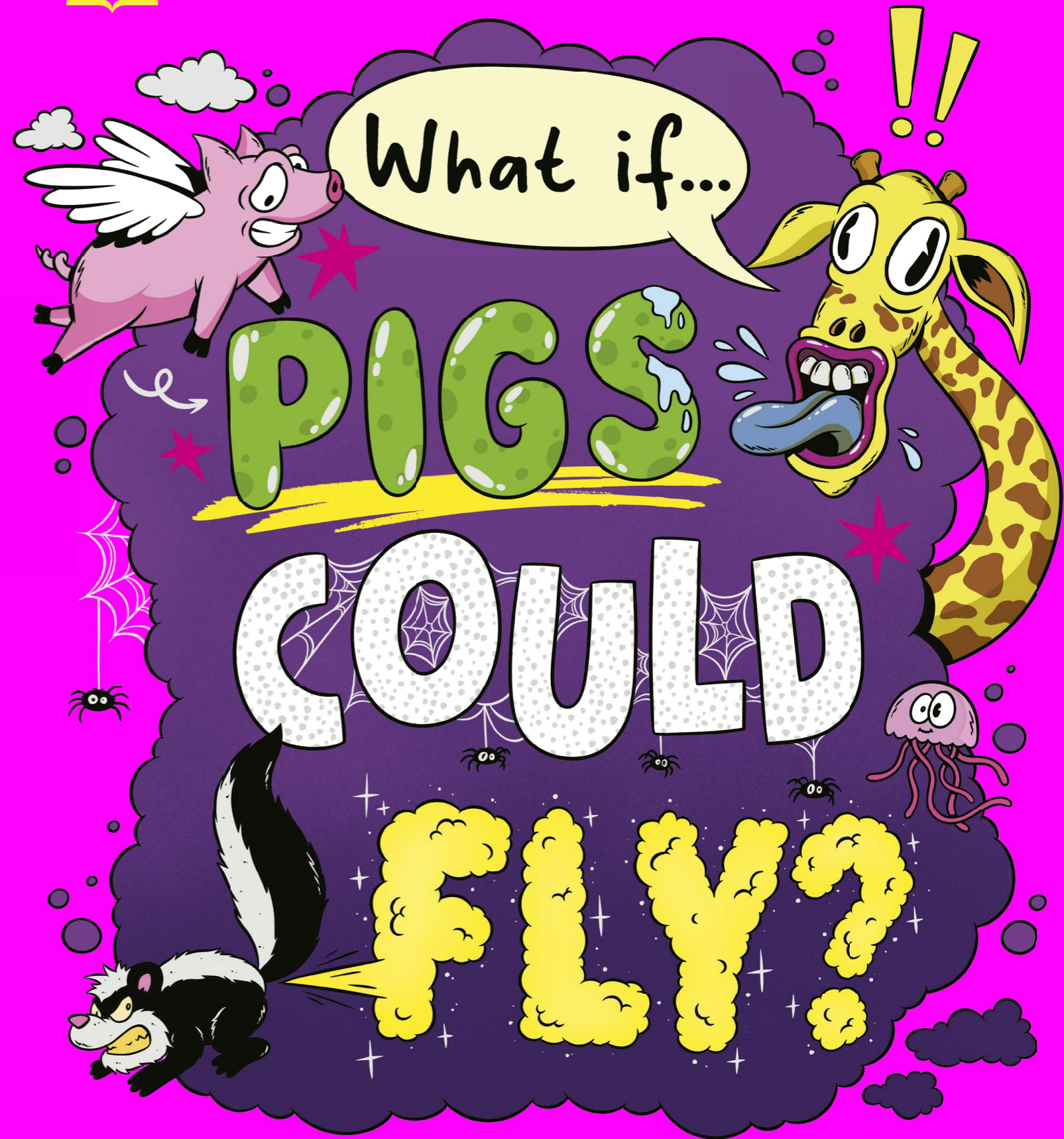


"Terrific" - Bill Bryson

EMMA YOUNG

What if...

PIGS COULD FLY?



AND OTHER AMAZING **ANIMAL** QUESTIONS

What if worms had legs?

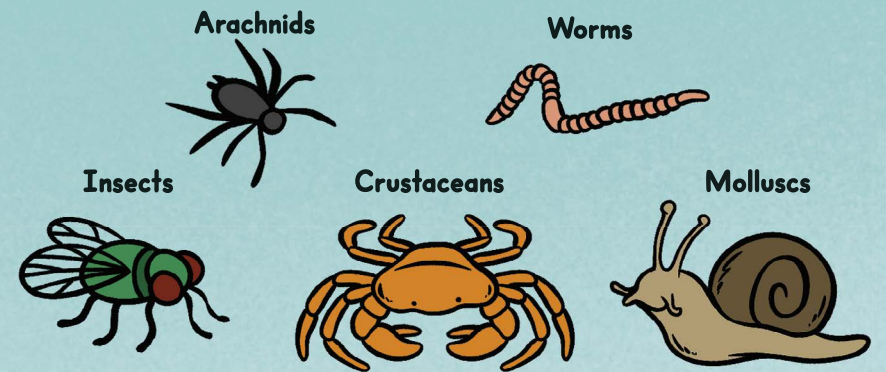
Some little earth-dwelling creatures with long bodies DO have legs. Just look at centipedes, which can have up to 382. And millipedes - which can have up to 1,306! What if earthworms sprouted hundreds of little legs, too?



Minute to massive

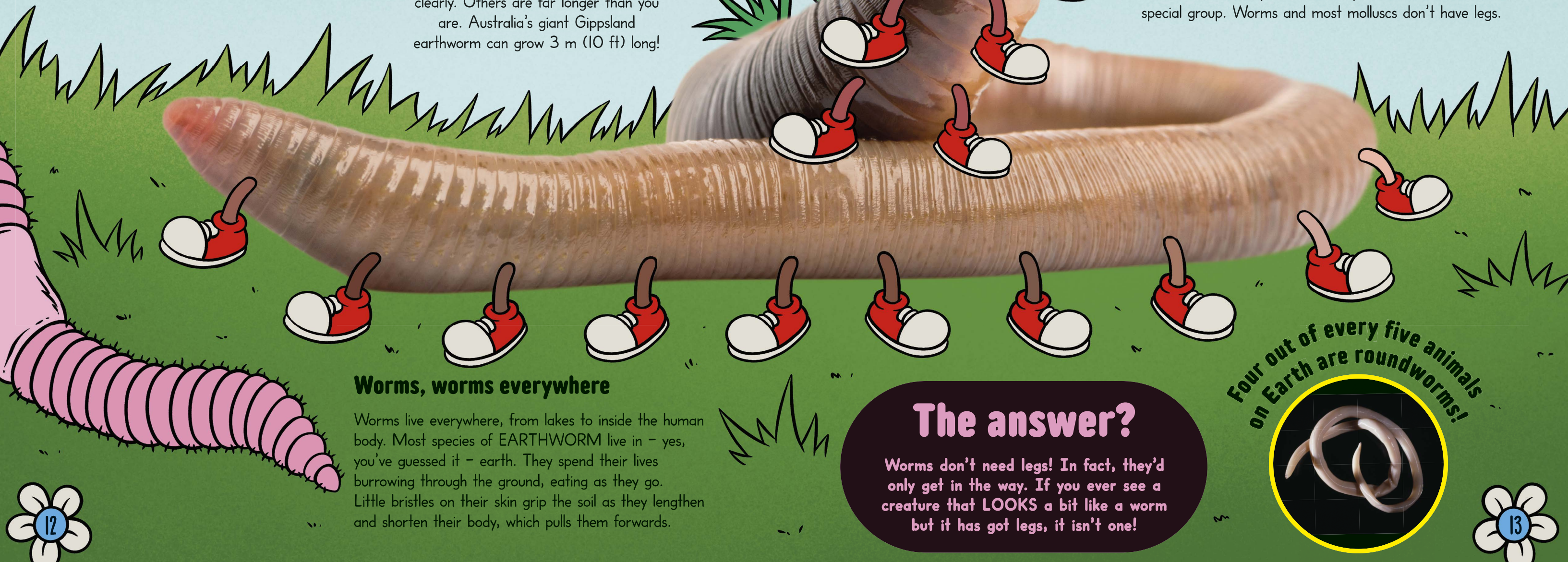
We know at least 30,000 SPECIES OF EARTHWORM! Some are so small, you'd need a microscope to see them clearly. Others are far longer than you are. Australia's giant Gippsland earthworm can grow 3 m (10 ft) long!

Tapeworms that live inside people can grow to 10 m (33 ft) long.



Bone-less bodies

Scientists love putting things into groups. Animals are divided into two massive ones: those with a backbone (vertebrates) and those without a backbone (invertebrates). In fact, invertebrates don't have a single bone in their body! This group is further divided up into smaller groups. Some of the most familiar are: insects, crustaceans (said krust-AY-shuns), molluscs, arachnids (said a-RAK-nids), and worms. Centipedes and millipedes are in their own special group. Worms and most molluscs don't have legs.



Worms, worms everywhere

Worms live everywhere, from lakes to inside the human body. Most species of EARTHWORM live in - yes, you've guessed it - earth. They spend their lives burrowing through the ground, eating as they go. Little bristles on their skin grip the soil as they lengthen and shorten their body, which pulls them forwards.

The answer?

Worms don't need legs! In fact, they'd only get in the way. If you ever see a creature that LOOKS a bit like a worm but it has got legs, it isn't one!

Four out of every five animals on Earth are roundworms!



What if you pooped like a penguin?

There are **EIGHTEEN** different species of penguin. Let's take a closer look at the gentoo, which lives in and around Antarctica. These penguins are the world's fastest underwater birds. They also have an interesting pooping technique!

Gentoo penguins can swim at speeds of 36 kph (22 mph).



Pink poo

Gentoo penguins mostly feed on pinkish, shrimplike krill, as well as fish and squid. It doesn't take them long to digest their food. They release runny waste, called "guano", as often as every 20 minutes! The pink colour of the krill can make their poo pink, too.

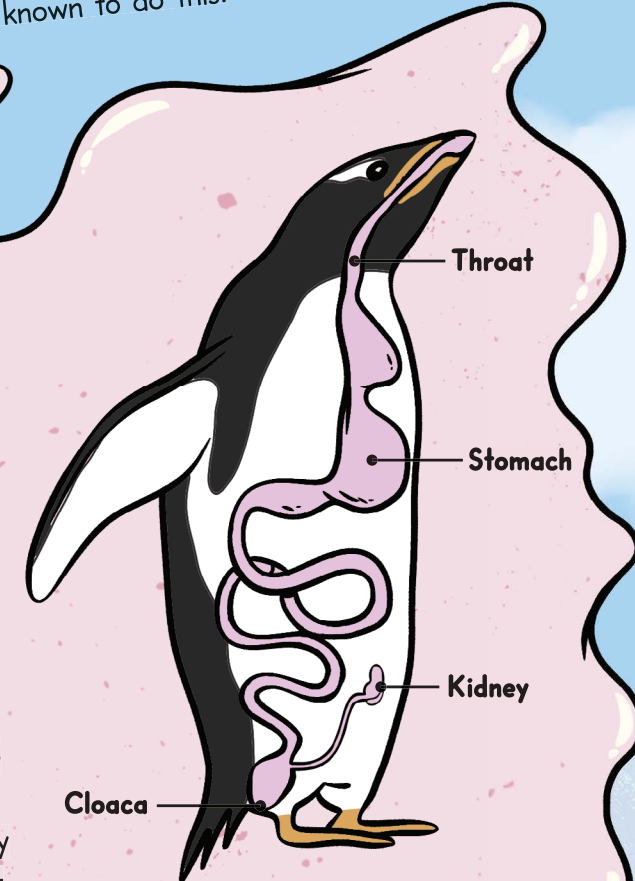


Cool idea

Some birds poo guano down the backs of their own legs **ON PURPOSE**. As the liquid in it evaporates, it cools them down. Several species of stork, as well as some vultures and condors are known to do this.

Projectile poo

Mammals release liquid waste (wee) and solid waste (poo) from different openings in their bodies. Birds dump **ALL** of their waste through a single opening, called a cloaca (said kloh-A-ka). In almost all birds, the liquids and the solids are mixed into guano. Guano is **NOT** pleasant. Unsurprisingly, gentoo penguins don't like to have it in their nests. So, while they're looking after eggs or chicks, they will point their rear end away from the nest, lift their tail, and "fire" a jet that can travel up to 1.2 m (4 ft) away!



The answer?

If you pooped like a penguin, your wee and poo would get mixed, and come out together. And you'd be able to fire it a long way - up to about twice the length of your body!

Guano washed into the sea helps coral reefs grow!

What if giraffes laid eggs?

Well, they'd have to sit down to do it, or those eggs would definitely smash! If giraffes DID lay eggs, it would make them a pretty unusual mammal. They wouldn't be unique, though...

Hatch or hold?

Birds, and most reptiles, amphibians, and invertebrates, lay eggs. Some eggs - like bird eggs - have hard shells, but others - like frog eggs - have soft shells. Most animals that don't lay eggs still produce eggs, but their eggs develop into babies INSIDE their body.

Ostrich eggs - the world's biggest - are 20 times heavier than chicken eggs.

Long wait

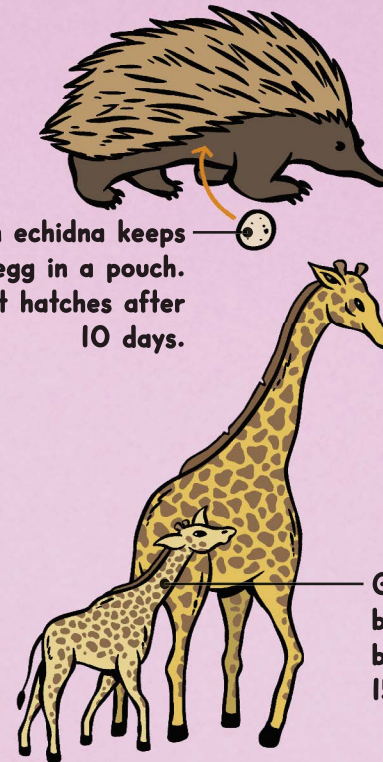
It takes about 21 days for fluffy chicks to hatch from chicken eggs, during which time they must be kept warm and safe. But for some animals this "incubation period" is a lot longer. One deep-sea octopus was watched tending her eggs for FOUR AND A HALF YEARS, keeping them clean and guarded.



Eggs or babies?

Like us, giraffes are mammals - one of the five main groups of animals that have a backbone. Mammals are warm-blooded and have hair - and they almost always give birth to babies, which they feed with milk. In fact, only FIVE of the more than SIX THOUSAND mammal species lay eggs instead. They are known as monotremes (said MON-oh-treems) and they all live in Oceania. One is the duck-billed platypus. The rest are all species of echidna (said eh-KID-na) - which look quite like hedgehogs.

An echidna keeps its egg in a pouch. It hatches after 10 days.



Giraffes give birth to a single baby after 15 months.

The answer?

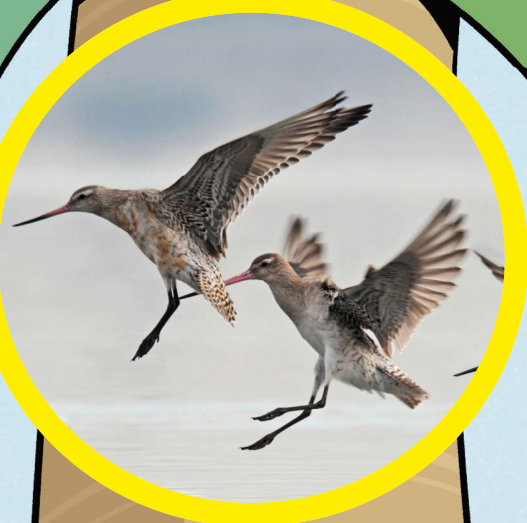
If giraffes laid eggs, they wouldn't be the only mammals to do so, but they would be the largest by far. And as a baby giraffe takes more than a year to grow, its parents would have to spend a long time protecting their egg, and keeping it warm!

What if grizzly bears went on holiday?

Grizzly bears are brown bears that live in the northwest of North America. Here, the summers are warm and there's plenty to eat. In winter, though, the temperature plummets and food is very hard to find. Wouldn't it make sense for grizzlies to go somewhere hotter until spring?

Sun seekers

Lots of animals – especially birds – migrate, or move long distances, to find food when the weather turns cold. Swallows and swifts hop between Europe (where the summer is warm) and Africa (to escape the European winter). Bar-tailed godwits fly non-stop for nine days from the Arctic to New Zealand when it gets too chilly!



Safe spots

Another way animals deal with cold weather and little food in winter is to hibernate, or go into a sleep-like state, to wait out the bad conditions. Dormice do this. So do some bats, frogs, hedgehogs – and grizzly bears!

Energy-saving

A hibernating animal might look like it's sleeping. But hibernation is different to sleep. The reason for hibernation is to use less energy, so an animal's whole body slows right down. Wild grizzlies living in the coldest areas hibernate for about SEVEN MONTHS. During this time, they hide in holes called dens and don't eat or drink. Female bears do wake up to give birth to their cubs, but they don't leave the den until spring.

Grizzly bears dig warm dens to hibernate in.



While hibernating, a bear's temperature drops, and its breathing and heart rate slow down.

Australian eastern pygmy possums can hibernate for over a YEAR!



The answer?

If, like many other animals, grizzly bears took a holiday somewhere hot every winter, they wouldn't need to hibernate. But it would take them a long time to reach somewhere warm!