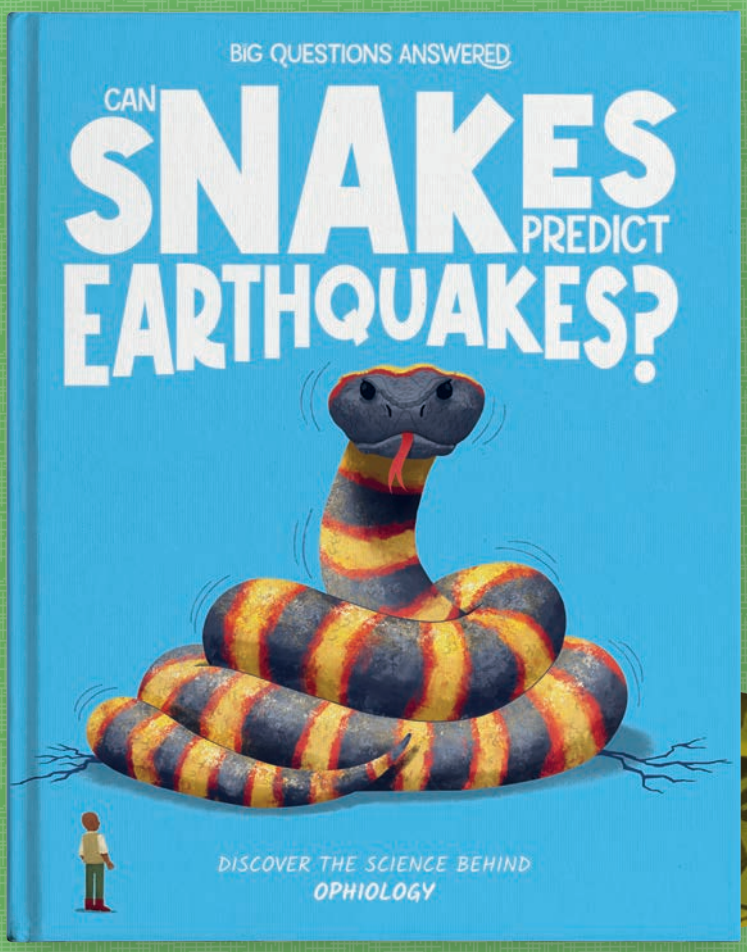
BIG QUESTIONS ANSWERED®

TEACHERS' & PARENTS' RESOURCES

Full of thought-provoking questions and fascinating extra information to accompany this book!



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INTRODUCTION

NOTES FOR TEACHERS, HOME EDUCATORS AND PARENTS

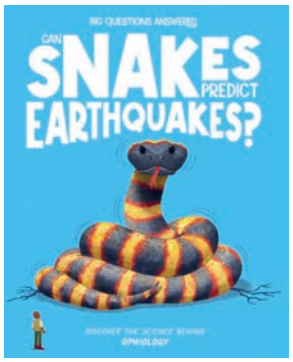
Inspire children's natural curiosity, improve literacy, and have fun learning about different sciences with The Big Questions Answered. Each book in the series is accompanied by a selection of fantastic, **FREE** downloadable resources.

Our **Teachers' and Parents' Resources** booklets are full of ideas for discussions, extra facts, and links to hands-on activities – all great ways to help children explore each field of science and the key topics surrounding them.

Our **Young Scientists' Activity Packs** are a real bonus. They're full of soft-learning, fun activities, all subtly linked to the field of science, that will encourage independent learning. Visit the 'Kids' Zone' to find out more.

Don't forget, on the website you can also download our **'Meet the Scientist' pages** – there's one to accompany each book – and sign up to our newsletter to follow what's coming up next for The Big Questions Answered. Download all these and more at: **www.thebigquestionsanswered.com**

Can Snakes Predict Earthquakes? book



Young Ophiologists' Activity Pack

KEY CURRICULUM TOPICS

The resources related to *'Can Snakes Predict Earthquakes?'* tie in with key curriculum topics, including:

- Animals, including humans
- Creative writing and literacy
- Human and physical geography
- Living things and their habitats
- Working scientifically
- Roman Empire

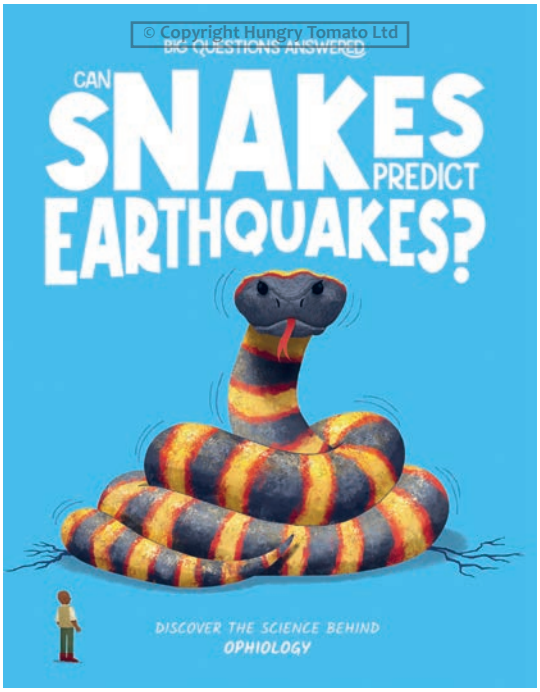
The most relevant topics are indicated throughout this guide.

CAN SNAKES PREDICT EARTHQUAKES?

This book explores the extraordinary world of ophiology. Using a 2006 Chinese earthquake as a key example, the book journeys through the discovery that snakes have an impressive connection with the environments they live in, allowing them to predict when earthquakes are on the way. As well as covering key facts, the book explores the wider world of snakes by looking at how they hunt, snakes that can live in the ocean, and the amazing positive benefits of snake venom in the world of medicine.

PRE-READING QUESTIONS

Engage in discussion about the general topic of ophiology with the suggested questions below.



- **What do you know about snakes already?**
- **What do you know about earthquakes already?**
- **Do you think snakes could predict earthquakes?**

THE MOST VENOMOUS SNAKE: SCENE 1

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to the world of snakes by explaining how snakes can adapt and survive in all sorts of environments. Focus on how snakes have adapted over time to use venom to warn off predators and kill prey.

DISCUSSION PROMPTS

- **Do you know what venom is?**
Information overleaf

- **Where do you think snake venom comes from?**
Encourage children to discuss what they already might know about snake venom, such as where snake venom comes from, how snakes use venom, what animals the venom affects, and so on. Information overleaf

- **Do you know what a warm-blooded animal is?**
Information overleaf

ACTIVITY

Corresponding activity on page 3 of the activity pack: 'Snakes Around the World' is a creative drawing activity where children are encouraged to draw a snake of their choosing and a home for it to live in.

THE MOST VENOMOUS SNAKE: SCENE 1

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

SNAKE VENOM

Snake **venom** is a special liquid made by certain snakes to protect themselves from **predators,** and hunt their own **prey**.

It is produced in **glands** inside their head, and moves through sharp, **hollow** fangs.

When a snake bites, it injects venom into its prey, which can make the prey weak or sleepy, making it easier for the snake to catch.

Some venoms are so strong that they can be very dangerous to other animals, and even humans!

WARM-BLOODED ANIMALS

Warm-blooded animals are animals that can keep their **body temperature** steady, even when it's very hot or cold outside.

Examples of warm-blooded animals include:

- Mammals (including us!)
- Birds
- Marsupials (such as koalas and kangaroos)

Unlike cold-blooded animals, these animals don't need the Sun to stay warm. Cold-blooded animals are animals whose body temperature matches their surroundings. Examples include snakes, lizards, and frogs.

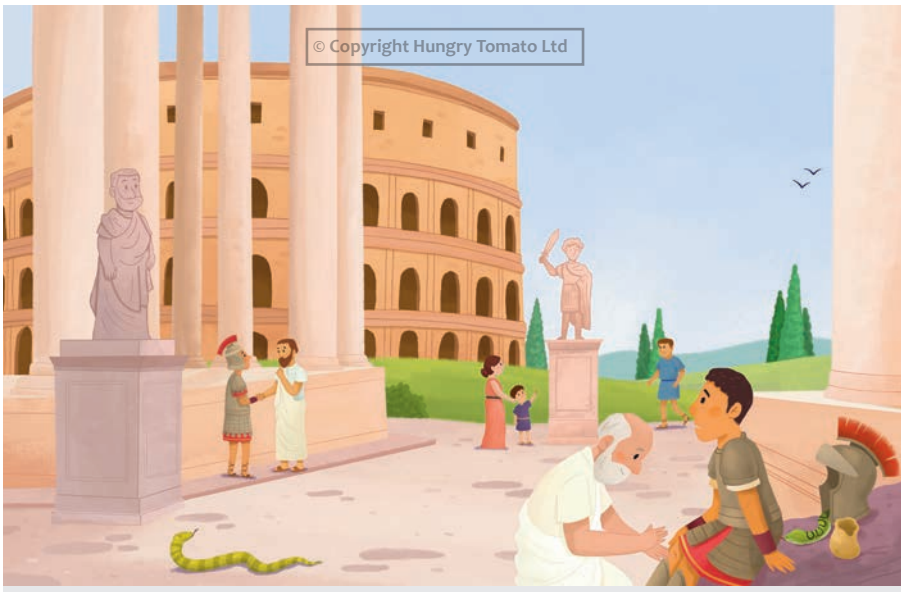
Instead, they use energy from food to make heat inside their bodies.

This helps them stay active in all kinds of weather, allowing them to live in many different places around the world.

IN ANCIENT ROME: SCENE 2

The material for this scene can be linked to curriculum topics, including:
animals, including humans; Roman Empire.

Introduce children to Ancient Rome, including how people lived during this time period and the famous buildings that still stand today. Discuss how the Ancient Romans used snake venom in a positive way.



DISCUSSION PROMPTS

- **What do you think life was like in Ancient Rome?**

Encourage children to discuss what life may have been like in Ancient Rome, such as what clothes they wore, what they ate, and their day-to-day activities.

- **Can you name the famous building in this scene?**

Information overleaf

- **How was snake venom used in Ancient Rome?**

Information overleaf

ACTIVITY

Corresponding activity on page 4 of the activity pack: 'A Day in Ancient Rome' is a creative writing activity where children are encouraged to imagine life in Ancient Rome and write a diary entry about what they would get up to in a day.

IN ANCIENT ROME: SCENE 2

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

THE COLOSSEUM

The Colosseum is a huge, ancient **arena** in Rome, the capital city of Italy, where crowds used to gather to watch exciting events.

Built nearly 2,000 years ago, it could hold thousands of people.

Gladiators, who were a special type of Roman fighter, would battle each other, or even wild animals, such as bears, rhinos, and elephants, in the Colosseum!

It was a place of entertainment for the Ancient Romans.

Today, it stands as a famous symbol of Ancient Roman history and **architecture**.

SNAKE VENOM IN ANCIENT ROME

Many people in Ancient Rome believed that snake venom had special powers and used it in medicine, but it was also feared because of how dangerous it could be.

Romans used careful **doses**, believing that tiny amounts of venom could build **resistance** against, and treat the symptoms, of illnesses.

This included prescribing snake venom for **fever**, **wounds**, **smallpox**, and **leprosy**.

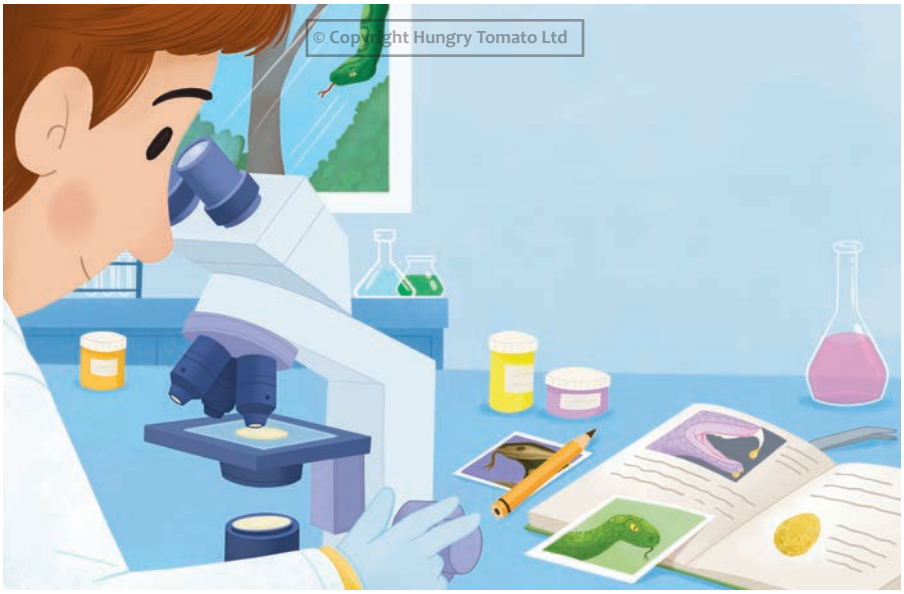
As well as for medicinal reasons, snake venom was sometimes used in battles or **assassinations** because of the powerful effects it had on people.

Romans sometimes used venomous snakes as a weapon or punishment in the Colosseum to make battles more dramatic!

MODERN MEDICINE: SCENE 3

The material for this scene can be linked to curriculum topics, including:
animals, including humans; creative writing and literacy; working scientifically.

Introduce children to how snake venom is used in modern medicine, and how scientists carry out lots of scientific research to ensure that medicine is suitable for treating people. Discuss how modern medicine differs from the medicine used in Ancient Rome.



DISCUSSION PROMPTS

- **How do you think snake venom is used in medicine today?**
  Information overleaf

- **Can you name the piece of scientific equipment that is being used in this scene?**
  Information overleaf

- **Were you surprised to learn that snake venom is used in medicine?**
  Encourage children to discuss how they feel about snake venom being used in modern medicine.

ACTIVITY

Corresponding activity on page 5 of the activity pack: 'Snake Venom Medicine' is a creative drawing and writing activity where children are encouraged to design their own life-saving snake medicine!

MODERN MEDICINE: SCENE 3

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

SNAKE VENOM IN MEDICINE TODAY

In modern medicine, scientists still use snake venom to create powerful medicines.

Certain parts of venom can help treat heart problems, blood clots, and general pain issues in humans.

Researchers study venom carefully in **labs** to pick out the useful **chemicals** while removing the harmful parts!

By separating the useful and harmful parts of snake venom, doctors can safely help patients.

Snake venom is now used as a tool for creating medicines that improve human health in surprising ways!

SCIENTIFIC EQUIPMENT: MICROSCOPE

A microscope is a scientific tool that helps us see very tiny things, like cells or bacteria, that are normally invisible to the naked eye.

Inside microscopes, there are special lenses which make objects appear much larger and clearer.

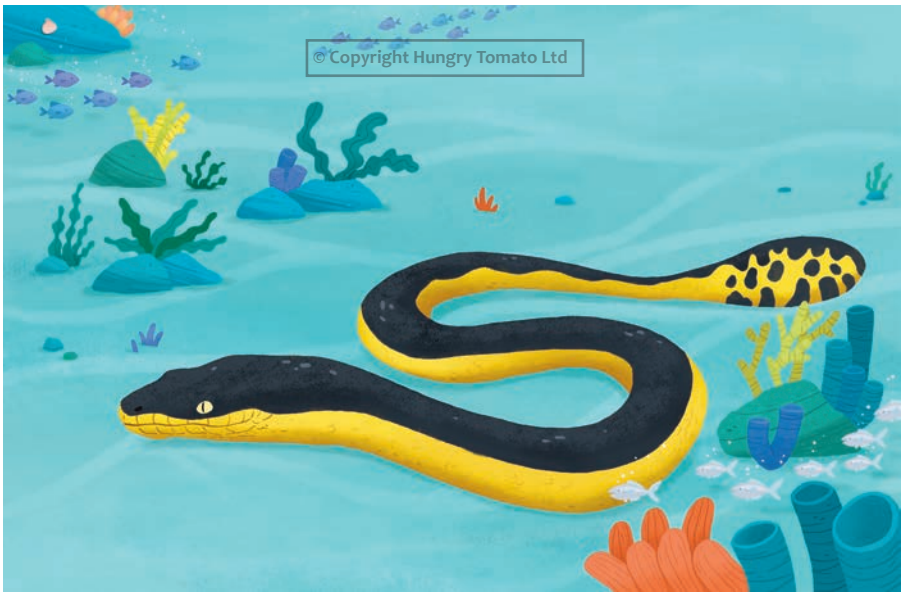
Microscopes are important in lots of different sciences because they allow us to study details in plants, animals, and even germs that help scientists understand how life works on a small scale.

When it comes to snakes, microscopes are useful for scientists who are studying snake venom in order to use it for medicine.

SNAKES IN THE SEA: SCENE 4

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to snakes that can live underwater, like the yellow-bellied sea snake. Discuss how these impressive snakes survive, and how they have adapted to live in the sea, as well as on land.



DISCUSSION PROMPTS

- **Did you know that some snakes can swim?**
Encourage children to discuss what they know about snakes already, if they were aware they could swim, and if they know of any other types of snake that live underwater.

- **How many snakes do you think live underwater?**
Information overleaf

- **What is oxygen?**
Information overleaf

ACTIVITY

Corresponding activity on page 6 of the activity pack: 'Superb Snake Facts' is a fact file activity which encourages children to do their own research on a species of snake.

SNAKES IN THE SEA: SCENE 4

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

UNDERWATER SNAKES

Some types of snakes can live and hunt underwater!

These are often called sea snakes, and have **adapted** for life in the ocean.

There are over 60 **species** of sea snakes around the world.

Sea snakes have flat tails to help them swim, and they can hold their breath for a long time, sometimes for up to an hour!

They come to the surface to breathe air, just like we do!

Sea snakes often hunt fish and other small creatures underwater, and can be found in warm, **tropical** oceans.

WHAT IS OXYGEN?

Oxygen is an invisible **gas** that is essential for life on Earth.

It's in the air we breathe, and is needed by humans, animals, and plants to survive.

When we breathe in, our bodies use oxygen to create energy.

It's also a part of water and helps things burn, which is why it's important for fires to keep going.

Oxygen makes up a big part of Earth's **atmosphere** and helps keep our planet healthy and full of life.

SNAKES THAT CAN FLY: SCENE 5

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to snakes that glide through the air, like the paradise flying snake. Discuss how these incredible snakes have adapted to survive, including how they use their environment to escape predators and hunt prey.

DISCUSSION PROMPTS

- **Did you know that some snakes can fly?**

Encourage children to discuss what they know about snakes already, if they were aware that some snakes could fly, and if they know of any other types of snake that can do this.

- **How many types of snake do you think can fly?**

Information overleaf

- **What is an environment?**

Information overleaf

ACTIVITY

Corresponding activity on page 7 of the activity pack: 'Soaring Snakes' is a crossword activity where children use clues to figure out all the different snake-related words! They can then fill in the crossword with the answers.

SNAKES THAT CAN FLY: SCENE 5

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

SNAKES THAT CAN FLY

Some snakes, like the paradise tree snake, can actually glide through the air!

There are around five **species** of snake around the world that have this amazing ability.

These snakes live in trees and leap from high branches, flattening their bodies and moving in a wavy motion to 'fly' through the air.

This unique gliding helps them escape **predators** or find food.

Though they don't truly fly like birds, they can travel impressive distances by gliding from tree to tree in **tropical** forests.

WHAT IS AN ENVIRONMENT?

An environment is everything that makes up a place, including:

- plants,
- animals,
- water,
- air,
- and land.

Each environment, such as forests, deserts, and oceans, have different **conditions** where certain animals and plants live.

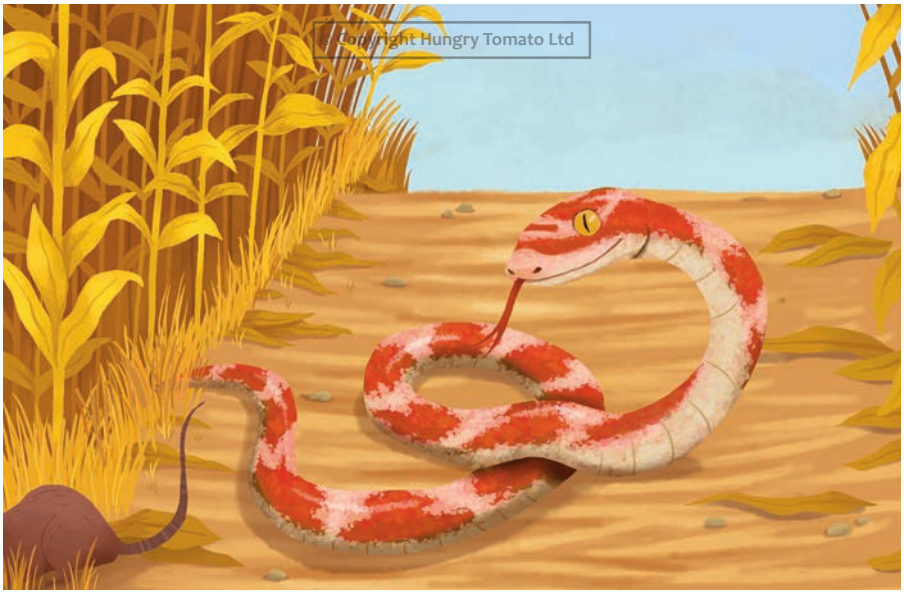
Environments provide food, shelter, and other needs for living things.

Keeping environments healthy is important for all life on Earth.

HUNTING FOR PREY: SCENE 6

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to how snakes use their connection to their environment to hunt for prey. Discuss the different ways snakes have adapted to become excellent hunters, no matter where they live.



DISCUSSION PROMPTS

- **Did you know that snakes can smell using their tongue?**
Encourage children to discuss what they know about snakes already, including if they knew that they could smell using their tongue.

- **What is an infrared system, and how do snakes use it?**
Information overleaf

- **What do snakes like to eat?**
Information overleaf

ACTIVITY

Corresponding activity on page 8 of the activity pack: 'Predators and Prey' is a match up activity where children must link the different predators to the prey that they like to eat!

HUNTING FOR PREY: SCENE 6

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

INFRARED SYSTEM

An infrared system is a system that some animals have – it is a way for them to 'see' heat.

Some animals, including certain snakes, can sense infrared light, which humans can't see.

This system helps snakes detect warm-blooded animals, like mice, even in the dark.

Special **pits** on their faces sense heat, allowing them to 'see' the warmth of other creatures, making hunting much easier.

This is especially helpful at night, as the **heat patterns** reveal where prey is hiding.

WHAT DO SNAKES EAT?

Snakes are **carnivores**, meaning they eat other animals.

Their diet includes a variety of prey such as:

- mice,
- rats,
- birds,
- frogs,
- and insects.

Large snakes, like pythons, may eat bigger animals like deer!

What snakes eat will also depend on the snake **species** and where they live.

Snakes swallow their food whole, using powerful muscles to move prey down their bodies for **digestion**.

AMAZING ABILITIES: SCENE 7

The material for this scene can be linked to curriculum topics, including:
animals, including humans; creative writing and literacy;
living things and their habitats.

Introduce children to some of the amazing abilities that snakes have, especially when it comes to eating their prey! Discuss these impressive traits, including the similarities and differences between how other predators eat their prey.

DISCUSSION PROMPTS

- **What's so special about the green anaconda?**
  Information overleaf

- **What other animals can you think of that eat their prey in unusual ways?**

- **What is the biggest type of prey a snake has been known to eat?**
  Information overleaf

ACTIVITY

Corresponding activity on page 9 of the activity pack: 'Watching Snakes in the Wild' is a reflective writing activity where children are encouraged to think more deeply about snakes and their impressive abilities.

AMAZING ABILITIES: SCENE 7

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

THE GREEN ANACONDA

The green anaconda is one of the heaviest and longest snakes in the world, found mostly in South American **rainforests** and **swamps**.

Growing up to 9 metres (30 ft) long and weighing around 250 kilograms (550 lbs), this massive snake is an expert swimmer.

It often hides in water, ambushing **prey** like fish, birds, and even large animals like capybaras!

Instead of venom, the green anaconda uses its strong muscles to squeeze and overpower its prey, swallowing it whole.

THE BIGGEST PREY

Some snakes are capable of eating prey much larger than themselves!

Massive snakes like the green anaconda and **reticulated python** have been known to consume animals as big as deer, antelope, and even small crocodiles.

These large snakes use powerful muscles to **constrict** their prey, stopping it from moving or getting away!

Then, they swallow it whole, thanks to flexible jaws that open very wide!

This incredible process of eating can take hours, and **digestion** can last weeks.

SNAKES SHEDDING SKIN: SCENE 8

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to how and why snakes shed their skin! Discuss other animals that shed their skin, and explore the process of moulting and why it's so important for so many animals.

DISCUSSION PROMPTS

- **Why and how do snakes shed their skin?**
Information overleaf

- **Can you think of any other animals that can shed their own skin?**
Encourage children to think of any other animals that shed their own skin, such as lizards, frogs, hermit crabs, spiders, and so on.

- **What is it called when animals shed their skin?**
Information overleaf

ACTIVITY

Corresponding activity on page 10 of the activity pack: 'Snake Comparison' is a fun activity where children must spot the 10 differences between the two images of snakes shedding their skin.

SNAKES SHEDDING SKIN: SCENE 8

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

WHY AND HOW DO SNAKES SHED THEIR SKIN?

Snakes shed their skin to allow growth and to remove **parasites**, or old, damaged skin.

As a snake grows, its **outer skin** layer becomes too tight and old, stopping it from being able to move.

To shed, a snake first creates a **fluid** under its old skin, loosening it.

Then, it rubs against rough surfaces, like rocks, to peel off the old layer, which comes off in one piece, revealing fresh, shiny skin underneath.

MOULTING

Moulting is the official name for what happens when snakes shed their skin!

Moulting is the process by which animals shed their outer layer, like skin, fur, or feathers, to allow for a new layer to come through.

Many creatures go through moulting, such as:

- insects,
- reptiles,
- and birds.

Moulting is really important for growth, helping animals replace worn out or damaged parts, as well as to keep them healthy as they grow larger.

CLEVER CAMOUFLAGE: SCENE 9

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to the concept of camouflage, and the different ways that animals use camouflage to survive. Discuss the different types of animals that are able to blend in with their surroundings.

DISCUSSION PROMPTS

- **What is camouflage?**
Information overleaf

- **Can you think of any other animals that use camouflage to blend in with their surroundings?**
Encourage children to think of any other animals that use camouflage, such as leopards, chameleons, snowy owls, and so on.

- **Why do animals use camouflage?**
Information overleaf

ACTIVITY

Corresponding activity on page 11 of the activity pack: 'Spot the Sneaky Snake' is a fun activity where children must spot the snake hiding among the vines and branches.

CLEVER CAMOUFLAGE: SCENE 9

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

WHAT IS CAMOUFLAGE?

Camouflage is a natural way animals blend into their surroundings to avoid being seen.

It involves colours, patterns, or textures that make them look like their **environment**, such as leaves, rocks, or trees.

This makes it hard for **predators** or **prey** to spot them!

WHY DO ANIMALS USE CAMOUFLAGE?

Animals use camouflage to stay safe and survive.

For prey, blending in helps them hide from predators.

For predators, camouflage is really useful for sneaking up on prey without being caught.

This helps them hunt without being detected, making camouflage a useful **survival** tool in nature.

For example, a chameleon can change the shade of its skin to match leaves, while a snowshoe hare turns white in winter to blend in with the snow.

This clever adaptation tool keeps animals safe and helps them find food.

SNAKES IN THE AMAZON: SCENE 10

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to the Amazon rainforest, and discuss why this environment is perfect for snakes. Explore what type of habitat a tropical rainforest is, and the snake species that like to live there.

DISCUSSION PROMPTS

- **What and where is the Amazon rainforest?**
  Information overleaf

- **Do you know any facts about the snakes in this scene? Which snake do you like best?**
  Encourage children to discuss and describe the snakes in this scene, including which ones they like best and why.

- **How many types of snakes do you think live in the Amazon rainforest?**
  Information overleaf

ACTIVITY

Corresponding activity on page 12 of the activity pack: 'All Sorts of Snakes' is a word search activity that encourages children to search for snake-related words in the scramble of letters.

SNAKES IN THE AMAZON: SCENE 10

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

THE AMAZON RAINFOREST

The Amazon rainforest is one of the largest and most diverse **ecosystems** on Earth, and covers nine South American countries.

Rainforests are forests that receive high levels of rainfall.

The Amazon rainforest is home to over 3 million species of plants and animals, including thousands of tree species alone!

This rainforest produces much of the world's oxygen and helps regulate global climate.

Its rich biodiversity includes countless unique animals, like jaguars, toucans, and river dolphins, all thriving in the Amazon's lush environment.

SNAKES IN THE AMAZON RAINFOREST

The Amazon rainforest is home to around 300 different snake species!

A few of these snakes include:

- the massive green anaconda, one of the world's heaviest snakes,
- the boa constrictor, known for squeezing its prey,
- the coral snake, with its strong venom,
- the pit viper, known for using **heat-sensing pits** to hunt in the dark,
- the emerald tree boa, known for blending in with the green **canopy**,
- and the Brazilian blind snake, which thrives on the forest floor.

HEADBUTTING SNAKES: SCENE 11

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats.

Introduce children to how different animals, including snakes, react to changes in their environment. Discuss why the animals in the scene below are reacting in strange ways, and how survival skills may play a part.

DISCUSSION PROMPTS

- **Why do you think the snakes are headbutting walls in this scene?**
  Encourage children to discuss their ideas and opinions.

- **Why do you think the birds are flying away in this scene?**
  Encourage children to discuss their ideas and opinions.

- **What are survival skills, and why do animals need them?**
  Information overleaf

ACTIVITY

Corresponding activity on page 13 of the activity pack: 'Super Snake Saves the Day' is a comic strip activity that encourages children to draw images to match the storyline provided.

HEADBUTTING SNAKES: SCENE 11

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

SURVIVAL SKILLS IN THE ANIMAL KINGDOM

In the animal kingdom, survival skills vary widely, helping animals thrive in their specific **environments**.

Snakes, for example, use **camouflage** to blend into their surrounding. This helps them to avoid **predators** and sneak up on **prey**.

Their venom and **constriction** abilities also allow them to catch prey and defend themselves effectively.

- Other animals use equally clever tactics:

- Chameleons change their skin colour to blend into their environment, hiding from predators.

- Birds of prey, like eagles, have incredible eyesight to spot food from high in the sky, allowing them to hunt efficiently.

- Insects like stick insects **mimic** twigs and leaves, making them almost invisible to potential threats.

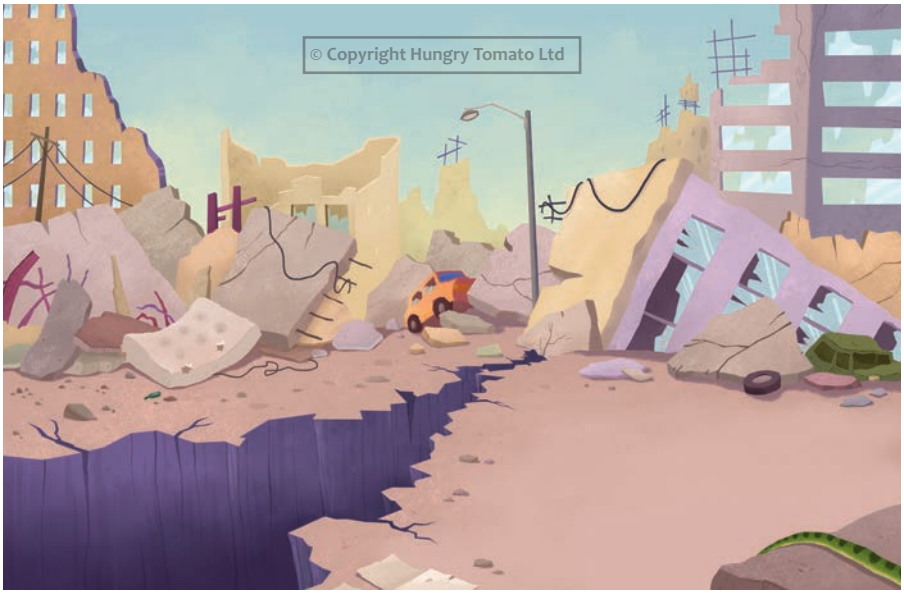
- The octopus uses both camouflage and ink clouds to escape predators quickly. By blending in with ocean rocks or releasing a dark cloud, it confuses enemies, allowing it to swim away safely.

Each of these skills are important, and help animals adapt to their specific environments and find food, safety, or shelter as needed.

PREDICTING EARTHQUAKES: SCENE 12

The material for this scene can be linked to curriculum topics, including:
animals, including humans; human and physical geography; living things and their habitats.

Introduce children to how snakes are so sensitive to the environment around them that they can predict when earthquakes are on the way!



DISCUSSION PROMPTS

- **What are earthquakes?**
  Information overleaf

- **How do earthquakes happen?**
  Information overleaf

- **Did you know that some animals can sense when earthquakes are on the way?**

ACTIVITY

Corresponding activity on page 14 of the activity pack: 'Snake Scramble' is a fun word game that encourages children to unjumble the snake-related words so they make sense again!

PREDICTING EARTHQUAKES: SCENE 12

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

WHAT ARE EARTHQUAKES?

Earthquakes are sudden shakes or vibrations of the ground caused by movements inside the Earth's **crust**.

These shakes can be small or very powerful, sometimes causing damage to buildings, roads, and landscapes.

Earthquakes can happen anywhere but are more common near **fault lines**, where **tectonic plates** meet and move.

HOW DO EARTHQUAKES HAPPEN?

Earthquakes happen because of shifts in the Earth's tectonic plates. The whole of Earth's surface is split into tectonic plates that are constantly moving.

These large plates float on **molten** rock and sometimes get stuck aginst each other due to **friction**.

When **pressure** builds up from this tension, the plates suddenly shift or break, releasing energy which cause **seismic waves**.

These seismic waves cause the ground to shake, creating an earthquake!

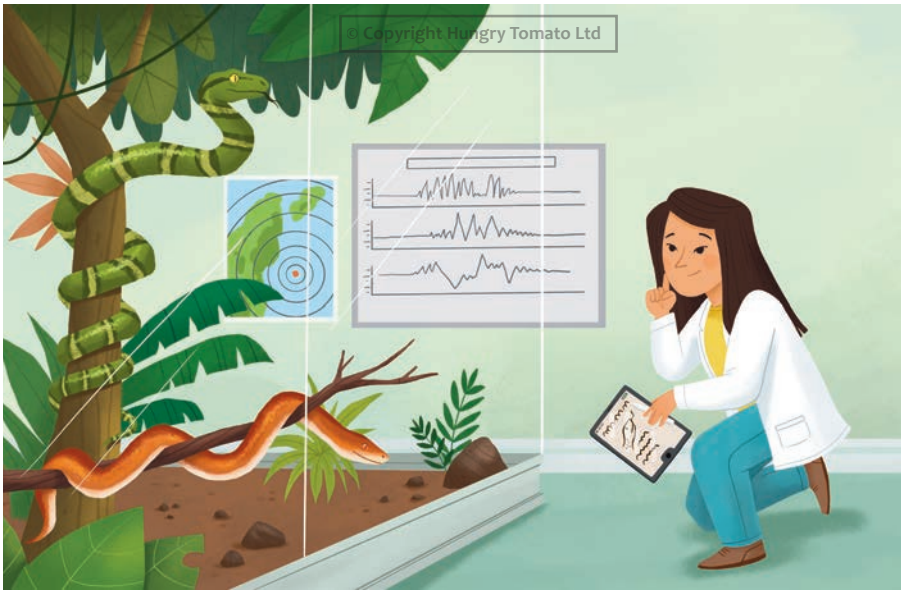
These movements help relieve stress in the Earth's crust, but can cause dramatic changes on the surface when they happen.

Scientists use the **Richter Scale** to rate the strength of an earthquake.

THE IMPORTANCE OF SNAKES: SCENE 13

The material for this scene can be linked to curriculum topics, including:
animals, including humans; living things and their habitats; working scientifically.

Introduce children to how important snakes are to understanding when earthquakes are on the way. Discuss how ophiologists are using what they know about snakes to warn people about upcoming natural disasters.



DISCUSSION PROMPTS

- **Who are ophiologists?**
  Information overleaf

- **Do you think it's impressive that snakes can predict earthquakes?**
  Encourage children to discuss what they think about snakes predicting earthquakes.

- **How do snakes, and similar animals, react when there is an earthquake on the way?**
  Information overleaf

ACTIVITY

Corresponding activity on page 15 of the activity pack: 'All About Snakes' is an engaging activity that encourages children to decide whether the provided statements are true or false.

THE IMPORTANCE OF SNAKES: SCENE 13

RELEVANT INFORMATION

Keywords that you may want to pull out and explain have been put into bold.

OPHIOLOGISTS

Ophiologists are scientists who study snakes!

They research lots of different aspects of snake **biology**, including their:

- habits,
- **habitats**,
- diet,
- and how they interact with the **environment**.

Ophiologists work in the field, in labs, and sometimes in zoos and areas of **conservation**, helping us better understand and protect these reptiles.

ANIMAL ANTICS BEFORE AN EARTHQUAKE

Many animals can sense an earthquake before it happens due to their heightened **senses**.

- Pets, like dogs and cats, often become restless, agitated, or anxious, showing unusual behaviour around their owners.

- Birds may suddenly fly away from their perches or even leave the area entirely.

- Cows and horses may become alarmed or try to move away.

This heightened awareness is believed to come from sensing **vibrations** or changes in the Earth's **magnetic field**.

POST-READING QUESTIONS

Engage in discussion about the journey taken throughout the book and the facts that were uncovered.

- **Were you surprised to learn that snakes can predict earthquakes?**
- **Did anything else in this book surprise you?**
- **What's the coolest thing you've learnt from this book?**

ACTIVITY

Corresponding activity on page 16 of the activity pack: 'Write Your Own Ophiology Story' is a creative writing activity which encourages children to write a story about ophiology, using three key prompt words.

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