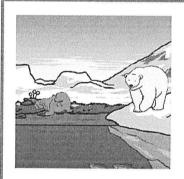
### **Polar Animals**

#### Polar Bears

Polar bears are very large, meat-eating mammals that can be found in the Arctic. Mammals are animals with fur and warm blood. Fully-grown polar bears can measure over 2.5m long and weigh around 700kg. They are not like other bears because they spend most of their lives swimming and hunting on ice for food. They only come onto land to have babies.

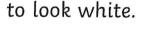
Polar bear cubs stay in their dens for up to five months after they are born and stay with their mums for up to 2 years after that.



#### Wow!

Polar bears are strong swimmers, using their huge feet like paddles to push through the water. They can swim for hours to get from one piece of ice to another.

Polar bears live at the very top of our planet, and it is bitterly cold there. Water and steam will freeze almost instantly in the Arctic in winter. Thankfully, polar bears are adapted for this environment. They have a thick layer of fat which keeps heat trapped inside their bodies. They also have a thick coat that keeps them warm and also helps them to blend in with the snow. Despite how it might look, a polar bear's fur isn't really white. It's actually transparent (see-through) and it reflects light







#### Penguins

Penguins are birds that spend much of their lives in the water and unlike most other birds, they cannot fly. Penguins do have wings but they are more like flippers to help them swim. As they live in water, their bodies have adapted so that they can swim brilliantly to catch food. Their bodies are smooth and dart-shaped so they glide easily through the water. They have dark feathers with light patches which help them to blend in so they are difficult to spot. This is a very useful way to trick predators and avoid being eaten!

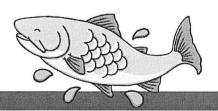
Penguins don't have to swim in deep water as the fish they catch are found near to the surface. Their feathers make their bodies waterproof.

Penguins are found on every continent in the southern hemisphere (the bottom half of the world). Most people think that penguins only live in the ice and snow but there are some species that live in warmer climates. The hottest penguin

habitat is the Galapagos Islands, where temperatures can reach as high as 32°C. Emperor and Adélie penguins live in Antarctica in temperatures as low as -60°C. Emperor penguins are the only animals to stay on

the open ice during an Antarctic winter, huddling together to survive the worst weather

conditions on earth.







## Questions

1.	What is a mammal?
2.	How long are adult polar bears?
3.	What happens to steam and water in an Arctic winter?
4.	What colour is a polar bear's fur?
5.	What does 'adapted' mean?
6.	Why do penguins have dark feathers with light patches?
7.	Where are emperor penguins found?
3.	Which is your favourite: a polar bear or penguin? Why?



## The Layers of the Ocean

#### Ocean Layers

Oceans cover two thirds of our Earth. The ocean is deeper in some places than others. We call these different depths, **layers**. Each layer is special, with different animals and plants living there.

Sunlight Zone

Twilight Zone

Midnight Zone

Abyss

Trench

### The Sunlight Zone

The Sunlight Zone is up to 200m below the surface of the ocean. Sunlight can reach this layer. Most of all, ocean animals and plants live here. The water is warm and both humans and fish swim here.

### The Twilight Zone

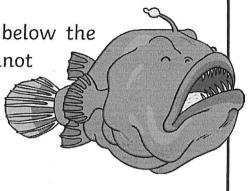
The Twilight Zone is up to 1000m below the surface of the ocean. The sunlight cannot reach this layer so it is very dark. Animals that live here often have big eyes to help them see.

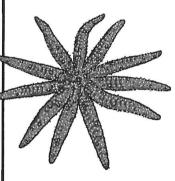




#### The Midnight Zone

The Midnight Zone is up to 4000m below the surface of the ocean. Sunlight cannot reach this layer, which means it is pitch black. Many animals that live here make their own light, such as lanternfish.



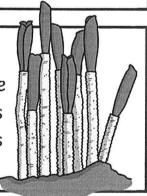


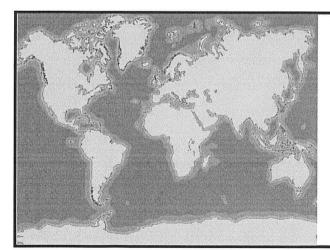
#### The Abyss

The Abyss is up to 6000m below the surface of the ocean. Sunlight cannot reach this level at all and the water is near freezing. Only a few animals can live here, such as sea stars and crabs.

#### The Trench

The Trench is up to 11,000m below the surface of the ocean. The Trench is also known as the ocean floor. The temperature here is near freezing.





#### Did You Know?

The deepest part of the ocean is in the Mariana Trench. It is almost 11,000m deep!



# Questions

1. How much of the Earth do oceans cover? Tick one.	
<ul><li>one third</li><li>two thirds</li><li>half</li></ul>	
<ul> <li>2. Number these ocean layers in order of he has been done for you.</li> <li>The Twilight Zone</li> <li>The Sunlight Zone</li> <li>The Midnight Zone</li> <li>The Abyss</li> </ul>	ow <b>deep</b> they are. The first one
3. Draw lines to match the sentences to the	e ocean layers they describe.
Only a few animals can live here.	The Sunlight Zone
Humans can swim here.	The Trench
This layer is also called the ocean floor.	The Abyss
4. Fill in the missing word.	
In the Midnight Zone it is pitch	
5. Why do animals that live in the Twilight	Zone often have big eyes?





## All About... The Fox

Foxes are a member of the dog family, and are found throughout the United Kingdom. Though they are like dogs, they are only a little bit bigger than most cats. The male fox is called a dog and a female fox is called a vixen.

#### **Amazing Facts**

Foxes have brilliant hearing. They can hear something as quiet as a watch ticking, from 30 metres away! This would be like hearing someone whisper from across the playground. As well as having great hearing, they can run really fast. They can run up to 30 miles per hour, which is really fast.



### Did you know?

They are mammals, which means they have warm blood and fur. Even though they are nocturnal (move around and eat at night), they can be seen during the day. They like to sunbathe.

#### What do foxes eat?

Foxes are carnivores, which means they eat meat, but they will eat berries off bushes and even look in rubbish bins for leftovers. Baby foxes, called kits, drink milk from their mothers before they start eating more usual foods like worms! Foxes will also hide food to come back and eat later.

#### Where do they live?

Foxes are found in all sorts of places, or habitats.

They live with other foxes in dens in the countryside but will also make their homes in towns and cities. You might spot one if you are out on a dark night.

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# Questions

1.	Foxes are only a little bit bigger than what animal?
2.	What is a female fox called?
3.	How fast can foxes run?
4.	Name two places you might find a fox.
5.	Name two things that a fox might eat.
6.	From how far away can a fox hear a ticking watch?
7.	What does nocturnal mean?
3.	How do we know foxes are mammals?

