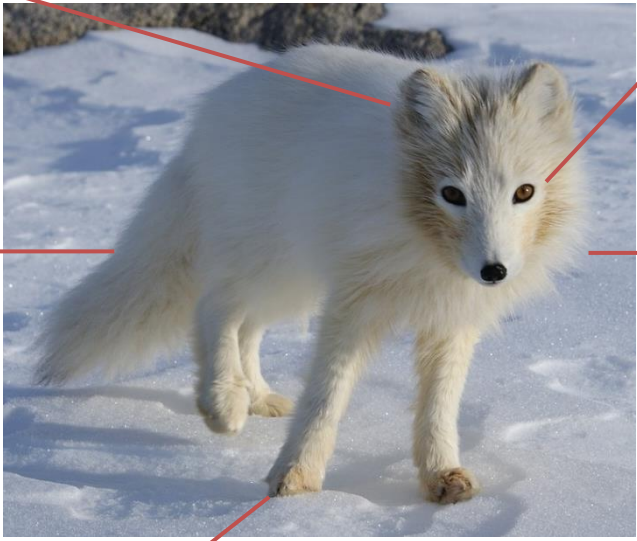




<p>Ears:</p>	<p>The Arctic fox adaptations</p>	<p>Eyes:</p>
<p>Fur and tail:</p>	<p>Describe and explain the adaptations of the Arctic fox. How does it survive in the Tundra?</p>	<p>Habits / lifestyle:</p>
<p>Feet:</p>		

The Arctic fox adaptations		
<p>Ears:</p> <p>The Arctic fox has facing ears. This enables it to pinpoint its</p> <p>The ears are, this means they lose less heat helping to keep the fox warm.</p> <p>The ears are also, this helps to keep the fox warm also.</p> <p>The fox has excellent</p> <p>Words to use: short, prey, furry, hearing, forward, body.</p>	<p>Complete each box to help explain how the Arctic fox is adapted.</p> <p>The words you need are at the bottom of each box.</p> 	<p>Eyes:</p> <p>Arctic foxes have very keen They can spot their easily in the distance.</p> <p>They almost all of the time, this helps them to see their prey as there is a lot of from the sun shining on the and snow.</p> <p>Words to use: squint, ice, eyesight, prey, glare.</p>
<p>Fur and tail:</p> <p>They have fur which them in the very cold weather.</p> <p>In winter they are, which them in the snow. In the summer they shed most of their white fur and become, this helps them to blend in with the</p> <p>Their tails help them to They also act as a blanket.</p> <p>Words to use: camouflages, balance, rocks, white, thick, insulates, brown.</p>		<p>Habits / lifestyle:</p> <p>Arctic foxes are, this means that they move around. The fox will to where there is</p> <p>They underground to avoid and to create a home for fox cubs.</p> <p>They follow polar bears and the meat that they have left behind.</p> <p>Words to use: food, scavenge, burrow, move, blizzards, nomadic.</p>
	<p>Feet:</p> <p>Their feet have a surface area, this helps them to on the snow without sinking in.</p> <p>Their feet also have a covering of on the sole, this also increases the area to help them walk on the snow. They have claws to help them rip up their prey.</p> <p>Words to use: fur, sharp, wide, walk, surface.</p>	

Exam question practice

WAGOLL vs WABOLL

What is **good** and **bad** about the two answers below?

Highlight where geographical vocabulary has been used.

Underline where points have been explained.

Question:

Plants and animals adapt to the physical conditions of the Tundra. Identify one plant and one animal and explain how each has adapted to live in the ecosystem. (6)

Answer 1

One plant that is adapted to living in the desert is the cactus. It is prickly, it stores water and it has long roots. It also has short roots as well. Some cactuses can expand to collect water. Some cactuses are poisonous. A cactus is xerophytic. A cactus has no stomata it is spikes instead. A cactus has no leaves. Cactus spikes means that animals won't eat it.

One animal that is adapted to living in the desert is the camel. It has humps, these store fat (not water), it has big feet, it has long eyelashes, it has a long tongue, it has sharp teeth. Camels are strong, camels have long legs, camels don't need to drink very often.

Camels have thick fur and thin fur. Camels can survive in different temperatures. Camels don't urinate often.

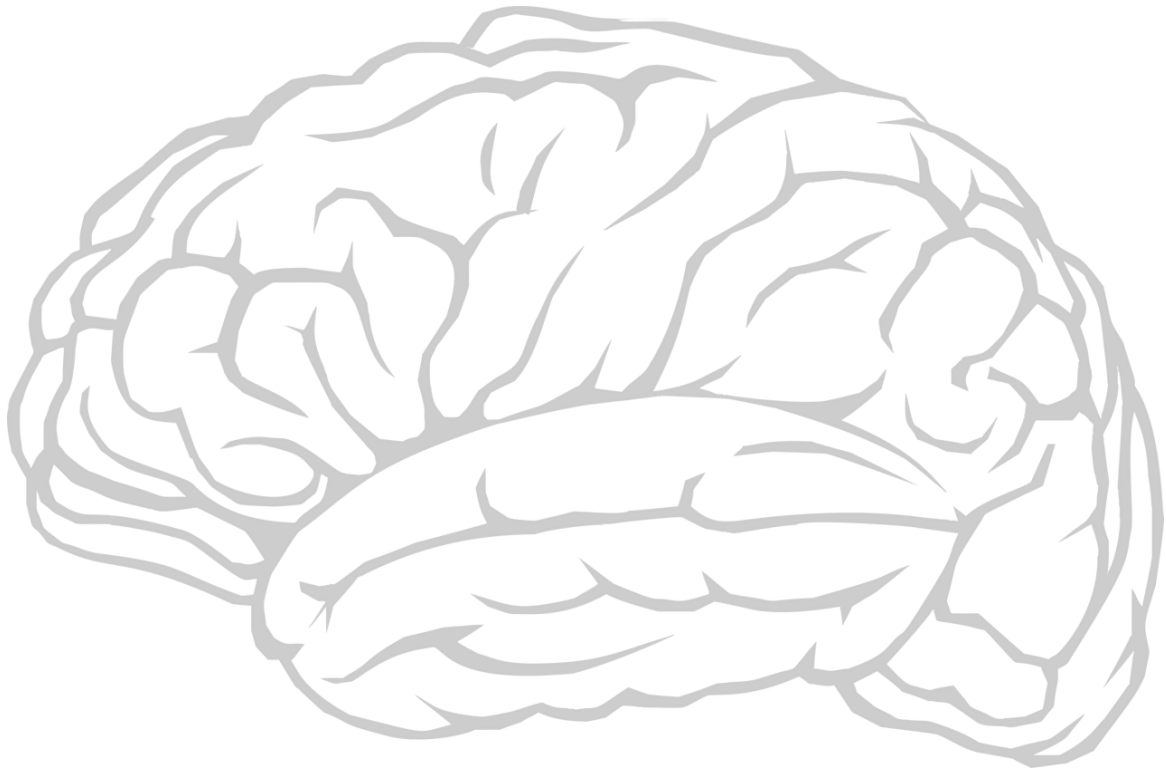
Answer 2

One plant that is adapted to living in the desert is the prickly pear cactus. It is xerophytic which means that it does not require much water to survive. This is important in the desert as it seldom rains. It has long roots which enable it to be anchored into the ground, this is important because it is very windy in the desert and the roots enable it to stay upright. The prickly pear cactus does not have leaves so less water is lost through evapotranspiration. This is important because the cactus holds onto the water instead of losing it.

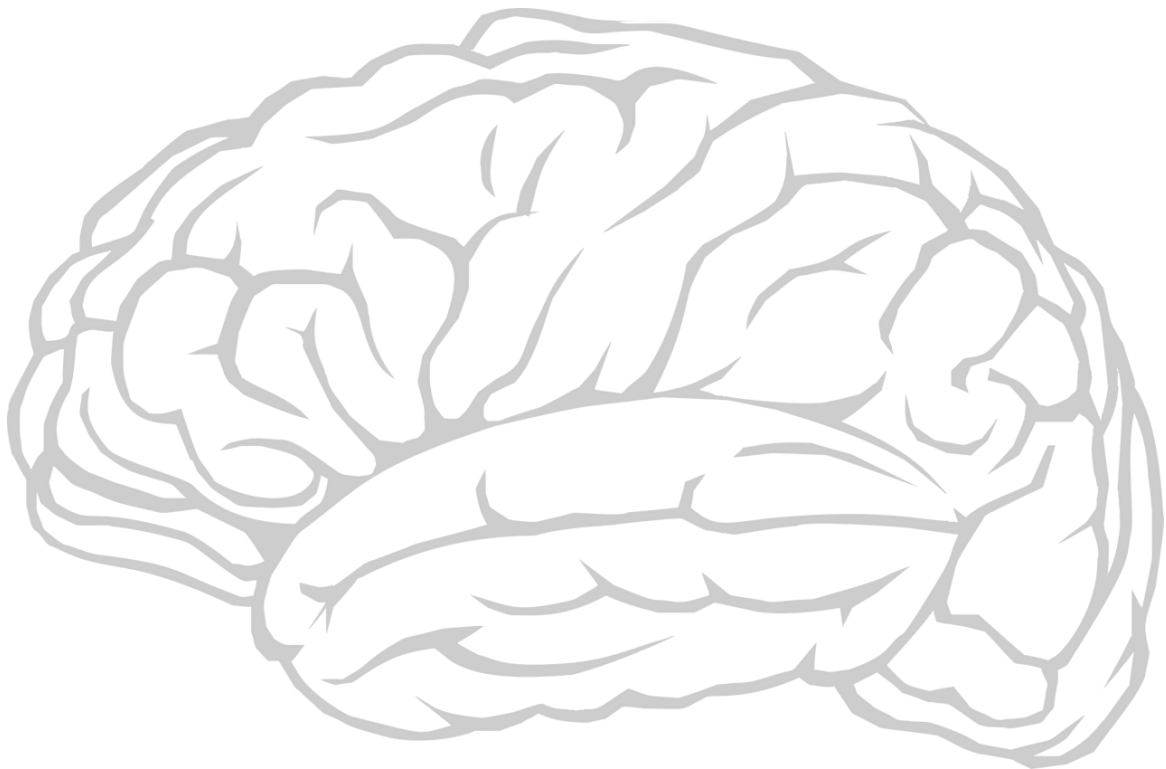
One animal that is adapted to living in the desert is the camel. It has large feet which enable it to walk in the desert sand without sinking in. It has thick fur on top of its body which provides shade and thin fur elsewhere to allow easy heat loss. In the desert there is an extensive temperature range. The thick fur will also keep the camel warm at night when the temperature drops.

A camel has multiple sets of eyelashes this keeps the sand out of a camels eye. Winds are very strong in the desert so sand is easily transported. The eyelashes are very important as they enable the camel to see despite the poor conditions.

Fill your brain with at least ten facts / pieces of information that you have learnt this lesson.



Fill your brain with at least ten facts / pieces of information that you have learnt this lesson.



Teacher notes

Starter:

Students to look at the two images of the Arctic fox and the cotton grass. They should write down what they think they are and include any adaptations that they think they have. This should be completed individually.

Think ... pair ... share ... : students can now share these answers together, before sharing with the class.

Main activity:

Discuss the Arctic fox and then watch the video clip. As the students are watching the clip they should make some notes on the adaptations that they see. Ask them to share their answers, then give the full list from the video.

Students can now complete their worksheet, filling each box with the adaptations. There is a differentiated sheet for students to complete with a cloze exercise for each adaptation.

Answers:

Ears: The Arctic fox has **forward** facing ears. This enables it to pinpoint its **prey**. The ears are **furry**, this means they lose less **body** heat helping to keep the fox warm.

The ears are also **short**, this helps to keep the fox warm also.

The fox has excellent **hearing**.

Habits / lifestyle: Arctic foxes are **nomadic**, this means that they move around. The fox will **move** to where there is **food**.

They **burrow** underground to avoid **blizzards** and to create a home for fox cubs.

They follow polar bears and **scavenge** the meat that they have left behind.

Feet: Their feet have a **wide** surface area, this helps them to **walk** on the snow without sinking in. Their feet also have a covering of **fur** on the sole, this also increases the **surface** area to help them walk on the snow.

They have **sharp** claws to help them rip up their prey.

Fur and tail: They have **thick** fur which **insulates** them in the very cold weather. In winter they are **white**, which **camouflages** them in the snow.

In the summer they shed most of their white fur and become **brown**, this helps them to blend in with the **rocks**.

Their tails help them to **balance**. They also act as a blanket.

Eyes: Arctic foxes have very keen **eyesight**. They can spot their **prey** easily in the distance.

They **squint** almost all of the time, this helps them to see their prey as there is a lot of **glare** from the sun shining on the **ice** and snow.

Discuss the cotton grass, students should then complete the sentences. For example:

Cotton grass doesn't grow very tall, this is an important adaptation because they are close to the ground where it is warmer and they are protected from the harsh winds that can occur in the Arctic. It has seeds which scatter in the wind, this is an important adaptation because the plants can regrow elsewhere. This continues the species.

The top of the plant is very dense, this is an important adaptation because it helps the plant to maintain heat. It is very cold in the Arctic so maintaining heat is very important for survival.

It has narrow leaves which help to reduce evapotranspiration, this is an important adaptation because it doesn't rain often in the Arctic therefore all moisture is essential. Through evapotranspiration plants lose water. As it has narrow leaves, less water is lost.

Exam practice:

Discuss the question with students. Key parts have been picked out to help them to decode the question. Ask a student to read each answer on the board. One is poorly written and one is well written. Students should use the WAGOLL / WABOLL sheet to annotate, highlight and underline.

WAGOLL - What a good one looks like.

WABOLL - What a bad one looks like.

Students can then write their own answers to the question and self-assess / peer-assess using the mark scheme.

Plenary:

Fill the brain. Students are to write down at least ten facts from the lesson and hand this into you. This could be used next lesson to address any misconceptions.