

Live:	Antarctica – the southernmost continent on Earth. They live in colonies . (This means they live together with the other of the same type of animal.)
Temperature:	Ranges from -10°C to as low as -60°C .
Size:	Around 115cm tall.
Appearance:	They have a white stomach and a black head, back, tail and wings. They also have yellow-gold markings on the side of their head and neck.
Eats:	Mainly fish , but they also eat squid and krill .
Travel:	Confident swimming and diving in water, glides on belly across the ice and walks in a waddle-like fashion.

How do they survive in the coldest place on Earth?

Emperor penguins have had to make **adaptations** in order to survive in Antarctica.

They have short, but strong legs and they waddle when they walk. This helps them save energy, so they can focus on staying warm. They have layers of tightly-packed and scale-like feathers that protect them from icy winds. They store body fat, which insulates them from the cold. Finally, they huddle close together in large groups to keep themselves, and each other, warm. This is a real team effort to make sure everyone has a turn of being on the outside and inside!

What is so special about penguin's breeding season?

In the harshest weather conditions during the Antarctic winter (June to August), emperor penguins breed on the thick



Antarctic ice. The female lays her egg and she passes the egg to the male, who incubates it by balancing the egg on his feet and covering it in his brood pouch (feathered skin). Then, the female heads straight to the ocean to get herself and the chick some food! The females return about two months later with very full bellies, which they **regurgitate** (throw up) for the chicks to eat. At this point, the male heads to the ocean to feed and the female will take care of the chick.

Their habitats threatened!

Emperor penguins are considered **near threatened** and their populations are expected to decline quickly and sharply due to climate change. Rising polar temperatures due to global warming will reduce the polar ice caps, which are their breeding grounds. Overfishing (for human consumption) will mean less food available for penguins to consume.

What can we do to help Emperor Penguins?

- Donate and fundraise for charities that help preserve the environment, like WWF
- Only eat sustainably-sourced fish
- Do not dump oil products in drains: accidental spills end up in ecosystems and are proven to accumulate in the polar regions
- Reduce your carbon footprint: make simple changes every day like walk over using car and turning off lights

Did you know that most emperor penguins are **monogamous**? This means they have one breeding partner for life.



QUESTIONS

1. List what an emperor penguin eats to stay alive

2. Where is Antarctica?

3. Why do you think an emperor penguin can travel in different ways?

4. Why do penguins waddle as they walk?

5. List two ways an emperor penguin has adapted to survive in Antarctica.



6. What does the word regurgitate mean?

7. Why do you think emperor penguins regurgitate their food?

8. Using information from the text, decide whether the following statements are fact or opinion.

	Fact	Opinion
They huddle close together in large groups	<input type="checkbox"/>	<input type="checkbox"/>
Their populations are expected to decline quickly	<input type="checkbox"/>	<input type="checkbox"/>
Emperor penguins are about 115cm tall	<input type="checkbox"/>	<input type="checkbox"/>

9. Sequence the mating season for penguins. 1 for first and 5 for last.

The male incubates the egg	<input type="checkbox"/>
The female leaves to find food	<input type="checkbox"/>
In June, the penguins breed on thick ice	<input type="checkbox"/>
The female returns and feeds her chick	<input type="checkbox"/>
The female lays her egg	<input type="checkbox"/>

ANSWERS

1. List what an emperor penguin eats to stay alive

Fish, krill and shrimps

2. Where is Antarctica?

It is the southernmost continent.

3. Why do you think an emperor penguin can travel in different ways?

They can travel in several ways so that they can choose the most efficient form of transport to get around in, in order to save energy.

4. Why do penguins waddle as they walk?

They waddle as it helps them to conserve/save energy.

5. List two ways an emperor penguin has adapted to survive in Antarctica.

1. They have short, but strong legs and they waddle when they walk. This helps them save energy so they can focus on staying warm.

2. They have layers of tightly-packed and scale-like feathers that protect them from icy winds

6. What does the word regurgitate mean?

Throw up

7. Why do you think emperor penguins regurgitate their food?

They regurgitate food for their chicks because the chicks are born a long way from their food source, so their parents bring food for them to survive until they grow bigger, can travel and find their own food.

8. Using information from the text, decide whether the following statements are fact or opinion.

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Emperor penguins are about 115cm tall	<input checked="" type="checkbox"/>	<input type="checkbox"/>

9. Sequence the mating season for penguins. 1 for first and 5 for last.

The male incubates the egg	4
The female leaves to find food	3
In June, the penguins breed on thick ice	1
The female returns and feeds her chick	5
The female lays her egg	2