

WELCOME TO OUR FROZEN PLANET

Wrap up warm, we're heading to the coldest places on Earth... the North and South Poles!

Wolves on the hunt for bison



A helicopter was vital when filming wolves

The icy realms at the very top and bottom of our planet – the Arctic and Antarctic – are two of the coldest, wildest and remotest places on Earth. But for the past four years, intrepid scientists, researchers and film-makers have been braving f-f-freezing temperatures to show us what life is like for the animals and people that call these amazing regions home!

Presenter and wildlife expert, Sir David Attenborough, tells NG Kids about the new TV series *Frozen Planet* and reveals how surviving in these vast wildernesses takes determination, skill and teamwork...



David heads to the Poles!

POWER OF THE PACK

In Canada, wolves work together to hunt one of the Arctic's largest mammals... the bison. With 25 wolves in the pack, the bison must stick together to avoid becoming prey. But the cunning canines split the herd and a young bison falls victim to the wolves. The kill will feed the pack for days.

"Using a high-tech heligimbal camera, the crew filmed an amazing sequence from a helicopter, without disturbing the wolves," reveals David. "The camera can be used from very far away, and it's also designed not to shake – essential when filming from a helicopter! It gives us a unique peek into the world of the wolves."

KILLER INSTINCTS

"Early polar explorers like Captain Scott [who set off on his fateful expedition to the South Pole 100 years ago] told stories about killer whales trying to knock humans off of ice floes by creating massive waves," says David. "Our film crew saw first-hand how cleverly these marine mammals put this

trick into practice when hunting seals!" The team used underwater cameras on poles to film pods of killer whales working together to catch other whales, penguins and seals. "They're very intelligent," David tells us. "And employ incredible team tactics like blowing bubbles and creating waves to capture their prey. Amazing!"



Killer whales work together as a team to catch their prey



Up close with killer whales!



Emperor penguins look after their eggs in freezing Antarctic conditions



Filming penguins is cold work

DID YOU KNOW...?

Captain Scott's 1911 expedition team perished after being beaten to becoming the first to reach the South Pole by Norway's Roald Amundsen.

STAND BY ME

As temperatures plummet to -40°C, male emperor penguins huddle together to protect the eggs they are incubating in their feathery pouch above their feet from the freezing winds. They stand here for over two months without food, through the worst of the icy Antarctic winter, while their female mate spends time feeding on fish at sea.

"Emperor penguins survive in the worst conditions you can imagine!" explains David. "But they're clever. Like humans, they'll stand near to each other to keep warm, or move behind each other to avoid the wind. Filming these animals was a real challenge for our team, but everybody stuck it out – just like the penguins!"

THE ARCTIC is at the northern-most region of the Earth. It's made up of the Arctic Ocean and parts of Canada, Finland, Greenland, Iceland, Norway, Sweden, Russia and the USA.



ANTARCTICA is the Earth's southern-most and fifth-largest continent and is surrounded by the Southern Ocean. It's also the planet's driest, coldest and windiest continent. *Brrr!*

Pictures: © BBC/Frozen Planet, Penguins: © Getty Images UK

DID YOU KNOW...?

One third of the planet is frozen and the polar ice caps hold 80% of the world's fresh water! The lowest recorded temperature on Earth is -89°C!



The Arctic is home to many indigenous people



Surviving in the Arctic is tough

HOME SWEET HOME

Antarctica has no permanent human residents, but many people live in the Arctic, mainly in Siberia. Here you'll find one of the coldest cities on Earth, Norilsk, where temperatures can drop to a teeth-chattering -50°C! The Arctic tundra (the region's treeless plain) is also home to many indigenous peoples like the reindeer-herding Dolgan, Nenets and Sami. Life here can be tough, but communities work together to hunt and look after their families. "If you asked these people if they would prefer to live in the city with all our comforts, they would probably say no," David tells us. "They are perfectly adapted to survive here – and after all, it's their home!"

To find out how Adelie penguins use teamwork to survive on the ice, go to ngkids.co.uk!