# Build THE Change

**FACT SHEET** 

### AT THE POLES



#### **GEOGRAPHY & CLIMATE**

The polar regions exist in the most northern and southern parts of the world, known as the north and south poles. The poles are extremely cold ecosystems. This is because these areas receive no direct sunlight due to the Earth's tilt. (1)

#### North pole is in the Arctic

The Arctic has no permanent land. The ecosystem is cold ocean waters, with large sheets of ice floating on them. In the winter, ice freezes over much of the Arctic ocean, allowing animals like polar bears and seals to move across the ice.

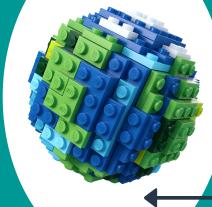
In the summer, the ice melts and some of these animals must move closer to land.

## South pole is in the Antarctic

The Antarctic is land surrounded by ocean.

It is covered in ice and snow during the winter, and thaws to bare rock in the summer. (1)

All year round, the poles experience low temperatures, high winds and frozen ground.(3)



**SEASONS** The poles only have two seasons, summer and winter. They may be different to what we are used to, as summer in the poles is still very cold!

During the winters, darkness often lasts for weeks or even months on end and during the summers it doesn't get dark, even in the middle of the night!(3)

**SUMMER** 

Temperatures average between 2 and 5 degrees Celsius.

WINTER

Temperatures can drop as low as -50 degrees Celsius! (2)

#### WILDLIFE



**POLAR BEARS** 



**WALRUS** 





**ORCA WHALE** 







**ADÉLIE PENGUINS ANTARCTICA** 

**SPERM WHALE** 

**ARCTIC & ANTARCTICA** 

#### WILDLIFE ADAPTATIONS

Because of the low temperatures and the difficult conditions, animals in the poles have to be specifically adapted to live there. Some examples of the wildlife you might find in polar regions can be seen above.<sup>(3)</sup>

Thick, white fur for warmth and camouflage, small ears and noses to prevent heat loss, big paws to stop them sinking in the snow and, most importantly, the ability to swim!



Ice Breakers Walruses' large tusks are very useful to them. They can use their tusks to pull themselves along the sea ice (tooth-walking) and to break through the ice.

#### **HOW ARE THINGS CHANGING?**

The polar regions are increasingly threatened by the effects of humans and development. These threats include:

- Climate change Warmer temperatures are causing the icy poles to melt quickly, which is impacting the ecosystem and its wildlife. (3) Animals such as polar bears are having to swim even further to find food and many other species are struggling to adapt to the changes.
- Fishing The oceans of the Arctic and Antarctic have lots of krill and fish, and have attracted fishermen from around the world, reducing the number of fish available for polar wildlife.<sup>(4)</sup>
- Pollution Scientists have noticed more and more pollution in the poles, harming the environment and the wildlife. Pollution has arrived by ocean currents, migratory birds, fishing boats and by people looking to holiday and live in the poles, and are poisoning plants and animals.<sup>(3)</sup>

#### It's feeling HOT HOT HOT

The Arctic is almost 10 degrees Fahrenheit warmer than it was in the year 1900, and is warming much more quickly than the rest of the planet. (4)



Several countries fall within the Arctic Circle: Canada, Greenland, Finland, Greenland, Norway, Russia, Sweden and the United States.(6)



Many indigenous people have survived in the Arctic Circle for thousands of years, surviving off the rural landscape and wildlife. (4)



The Antarctic is a continent and represents a huge area of land that is larger than the whole of Europe. (3)



#### **HOW CAN WE HELP?**

To help protect polar ecosystems, we need to work together.

It is important that we reduce the impacts of climate change as much as possible. This means governments across the world will need to create laws that reduce our impact and protect our environment.



#### RENEWABLE ENERGY

Most importantly, this will mean reducing greenhouse gas emissions by using more sustainable and renewable fuels.

#### **PROTECTION**

Drilling for fossil fuel in the poles is currently banned, following huge protests from the public, and so raising awareness of the issues the poles are facing is huge in helping to protect it.

#### REFUSE, REDUCE, REUSE, REPURPOSE, RECYCLE

People can also help in their own homes by reducing the amount of waste they create, reusing and recycling their possessions and making sustainable decisions about food, clothing and other resources.<sup>(3)</sup>

