

Polar Bear Melting Ice Activity



Aim: To explore and understand the consequences of the sea ice melting, such as reducing polar bear's habitat and rising sea levels.

To understand that the sea ice is melting because of climate change.

Resources

Large tarpaulin (or alternative e.g. sheet, blanket, etc.)

Polar bear masks (optional)

Curriculum Links

Science; Identify that most living things live in habitats to which they are suited and describe how different habitats provide the basic needs of different kinds of animals

Geography; Identify the location of cold areas of the world in relation to the North and South Poles or Arctic and Antarctic

This game provides a visual to help children understand how much sea ice has melted, due to climate change, since the 1980s and the consequences of this on polar bears habitat.

NASA have created an excellent animation which shows the loss of sea ice since the 1980s. Follow this link to view it: <https://svs.gsfc.nasa.gov/4510>

National Geographic have produced an informative article on the effect of melting sea ice on polar bears. Follow this link to further your own understanding: <https://news.nationalgeographic.com/2018/02/polar-bears-starve-melting-sea-ice-global-warming-study-beaufort-sea-environment/?user.testname=none>

Game

Put large tarpaulin on the ground. This represents the sea ice.

Children to put on polar bear masks (optional). All children are now polar bears. The sea ice is their home where they sleep each evening so they should start by all standing on the tarpaulin.

All the polar bears step off the 'ice' and go hunting around the room for food. Each time they are off hunting this represents five years in time. Whilst the polar bears are off hunting, take the tarpaulin and fold part of it over to represent the loss in sea ice in that five years.

Call the polar bears back to sleep on the ice. There is less room.

Again all the polar bears are to go off hunting. Fold in another bit of tarpaulin to represent the loss of sea ice over the next five years,

Call the polar bears back to sleep on the ice. Again there is less room so there may not be enough room for all the polar bears on the ice. Any polar bears that can't make it onto the ice need to go and sit down.

Repeat above until there is a small square of tarpaulin left with only room for a couple of polar bears left on the ice. This represents current day.

Discussion

Discuss the game with the children. You might want to show the children the NASA melting ice animation (<https://svs.gsfc.nasa.gov/4510>) to support this.

Why was there room for less and less polar bears every five years?

What will happen to the polar bears if the sea ice continues to melt?

Why is the sea ice melting? (climate change).

How can we stop the sea ice from continuing to melt?

