

Teachers' notes

Activities: Polar regions

Curriculum links: NC Science – SC1 1a, b; 2a, b, e, h, j. Sc2 1a, c; 5a, c, d. Sc4 4b, c, d. QCA – Science Unit 4B: Habitats, Unit 5E: Earth, Sun and Moon. Unit 6A: Interdependence and adaptation. NC Geography: 1a, d; 2c, d; 3a, b, d; 5a; 6e. QCA – Geography Unit 7: Weather around the world, Unit 16: What's in the news?

Activities Ages 7–11

1. Follow me

Enlarge, laminate and trim the pack of 'Follow me' cards on **Photocopiable 3**, 'Follow me card templates' for a speaking and listening activity using the information from the **Poster**. Begin by asking a child to read their question. The child with the correct answer card reads it, followed by their question and so on around the class until you are back to the start again.

2. What did you do today?

Ask the children to use the **Poster**, **Photocopiable 4**, 'Did you know?' and other reference material to pick their favourite animal from either the Arctic or Antarctica. First, they can make simple notes about where the animal lives, what it eats, its family, the weather, and so on. Next, ask the children to use this information to write a diary entry for their chosen animal. They can include the information they have researched, but also give the animal a character and express thoughts and feelings to bring it to life. More able children could write about multiple days.

3. Packing for survival

Once you've studied both regions' climates, challenge the children to think about what they would put in a survival pack if they were to visit either one. What do they think they will need? Ask them to consider these points: they would have to carry the pack, so items should be light; they will need lightweight, waterproof clothing to keep them dry and warm; food to give them energy; something to record their findings, and so on. They must be strict about what items they can take. For a D&T project, you could challenge the children to design their own survival bag. What features will it need to be fit for purpose?

Activities Ages 9–11

1. Where in the world?

Hand out the online **Photocopiable**, 'North and south', so children can take notes of their findings throughout this activity. Provide children with atlases and globes. Ask them to locate the north and south poles on the diagram and to draw a line between them to show the Earth's axis. Ask them to also mark the Arctic and Antarctic circles, equator and northern and southern hemispheres.

Using torches or other light sources, investigate what happens as the Earth spins on its axis. Compare places where it is day and night at any given time and make lists of countries.

Move the Earth around a central light source and compare its tilt in summer and winter. Note what happens in polar regions.

Extend by asking children to find other places that have day or night at different times. Orbit the globe around the light source to find spring, summer, autumn and winter in the northern hemisphere.



ICT links

For more information on polar regions, try:

- www.wwf.org.uk/gowild/ has a great section on 'Polar lands'.
- www.ukrivers.net/climate.html has links to other sites with information on global warming.
- http://tiki.oneworld.net/penguin/global_warming/climate_home.html is a child-friendly site with lots of information on how animals such as penguins are being affected by global warming.
- www.antarctica.ac.uk This British Antarctic Survey site has a useful 'Schools Resources' section with interactive teaching resources.
- www.nationalgeographic.com and search for 'Arctic' and 'Antarctica'.

