



Key Knowledge

- ✓ Know what the polar, tundra and taiga biomes are;
- ✓ Describe and explain the key physical and human features of the polar, tundra and taiga biomes;
- ✓ Know that the melting of sea ice around the Arctic and the permafrost within the tundra is having significant consequences for native peoples and wildlife;
- ✓ Know that Russia is the largest country on Earth (land size) and that it is located in the continents of both Europe and Asia;
- ✓ Know that Russia is home to 145 million people. Its capital city is Moscow.
- ✓ Know the key human and physical features of Russia, including that Russia is a major exporter of natural resources, including fossil fuels, that when burned to generate energy contribute to global climate change.

Maps



Big Idea

The cold spaces of our planet can either be found in the high-altitude mountainous areas or encircling the North and South Poles. In the northern hemisphere, Russia, being the largest country on Earth, according to land mass, dominates the Arctic Circle. The Arctic Circle is home to the taiga, tundra and polar biomes, where uniquely adapted flora and fauna thrive in the harsh conditions. Likewise, these vast expanses contain many of the world's natural resources. However, some of these contribute to global climate change, which is having significant consequences for these delicately balanced biomes.

Key Studies



Concepts



Place



Scale



Environment



Human and
Physical
Processes



Interconnection

Vocabulary

polar biome: the large areas of permanent ice caps that cover the North and South Poles. Antarctica is colder than the Arctic.

taiga biome: the large regions of northern coniferous forests found especially in Russia and Canada. The Taiga is the world's largest biome.

tundra biome: frozen lands, found especially in the Arctic, which support shrubs, mosses and lichens.

permafrost: frozen layer of soil, gravel and sand.

North Pole: the point at the Northern end of the Earth's axis.

Arctic Circle: the line of latitude north of which places continual sunlight in Summer (March – September) and continual darkness in Winter (October – February);

climate: a long-term weather pattern set over a period of time (+30 years).

Global Climate Change: any changes to the climate around the world, but especially the recent changes caused by human beings.

'You can travel the seas, poles and deserts and see nothing. To really understand the world, you need to get under the skin of the people and places. In other words, learn about geography.' Michael Palin.