



***To Russia with love
Some ideas for teaching about Russia in KS3 Geography lessons***

What does the curriculum say?

The new Key Stage Three (11-14) documents, which were released in September 2013, make specific mention of **Russia** as a place context for work to be done.

The overall Aims of the curriculum are to ensure that all pupils:

- **develop contextual knowledge of the location of globally significant places** – both terrestrial and marine – **including their defining physical and human characteristics** and how these provide a geographical context for understanding the actions of processes
- **understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time**
- **are competent in the geographical skills needed to:**
 - **collect, analyse and communicate with a range of data gathered through experiences of fieldwork** that deepen their understanding of geographical processes
 - **interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)**
 - **communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length**

In this context, Russia would certainly be classed as a 'globally significant place'. As a global superpower, and with its huge energy resources and geo-political influence, it is likely to play a significant part in international relations through the century ahead. Russia is a member of the G8 countries, and has influence in trade across a large part of the world.

At Key stage three, pupils should also:

*Consolidate and extend their knowledge of **the world's major countries and their physical and human features**. They should understand **how geographical processes interact to create distinctive human and physical landscapes that change over time**. In doing so, they should become aware of increasingly complex geographical systems in the world around them.*

Russia is specifically mentioned in terms of locational knowledge, place knowledge and Human and Physical Geography.

Students should:



Locational knowledge

- *extend their locational knowledge and deepen their spatial awareness of the world's countries, using maps of the world to focus on Africa, Russia, Asia (including China and India), and the Middle East, focusing on their environmental regions, **including polar and hot deserts**, key physical and human characteristics, countries and **major cities***

Place knowledge

- *understand geographical similarities, differences and links between places through **the study of the human and physical geography of a region in Africa and a region in Asia***

Human and physical geography

- *understand how human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on the effective functioning of natural systems*

Investigating the connection between the environment and the peoples who live in it lie at the heart of the Pole of Cold expedition's aims. Many of these people live in areas far removed from Moscow, where traditionally power lay. Although there has been some devolved power to the republics, there remains a legacy of previous political systems, which often marginalised areas in the far North. There is also the connection with the gulags, and the punishment of political dissidents. The 'Road of Bones': the old Kolyma highway, that the team will drive over was built by prisoners, with many deaths during the construction phase. It is also a major logistical problem to maintain the road.

The team visited the Gulag of Perm-36, which is now a museum and created a photo story of the visit: <http://poleofcold.com/perm-36-gulag-a-photo-story/>

One challenge for those teaching **Russia** is the tremendous scale of the country. This requires some sort of context, which narrows the focus. The context could be based on the journey too, by focusing on some of the key cities that were visited, but also the region of Siberia.

The big picture.

Russia is the largest country in the world, and occupies around 10% of the land surface. It spans 11 time-zones, 2 continents (Europe and Asia) and with coastlines on the world's great oceans. It has tens of thousands of rivers, major mountain ranges such as the Urals, and some of the greatest lakes, such as Baikal. There are over 100 ethnic groups, and many different languages spoken, and a population of over 140 million people spread over 17 million square kilometres.



One way to help to visualise the scale of Russia is to use **Google Earth** to 'visit' and make use of the measuring tool, or set the screen slowly scrolling across the vast tundra regions in the North of the country. The quality of imagery in parts of Russia is not to the same standard as that of the UK, and doesn't enable zooming in as close to the ground as it would in US cities for example.

The largest part of the **Pole of Cold** expedition takes place in Russia. The team had to do some additional preparation to enter Russia, with additional paperwork and visas, and also preparing the vehicle for roads, which weren't as well maintained and surfaced as elsewhere on the trip.

The team started out in St. Petersburg, where they explored some of the culture of the city, which has always been closely linked with European influences because of its location. They moved eastwards passing through other **cities** such as Perm, Irkutsk and smaller towns like Nerchinsk. There are some relevant photo stories created on the trip that might provide stimulus images:

<http://poleofcold.com/city-streets-of-russia-a-photo-story/>



The team also visited **Lake Baikal**, which could act as a context for exploring environmental issues. This is the largest expanse of freshwater on the planet, and has a significant impact on the local climate. Students may be familiar with the sad state of the Aral Sea, which was affected by previous plans for development of a cotton industry in the area.

Students could consider its status as a UNESCO World Heritage site:

<http://whc.unesco.org/en/list/754> and connect with the resources provided for the Google World Wonders project, and create materials in the same format, but for Lake Baikal:

<https://www.google.com/culturalinstitute/project/world-wonders>

Does it justify its status as the 'Galapagos of Russia'?

This lake often freezes over, but the team found that this had not happened yet when they first arrived, so were unable to use it as a highway.

The Pole of Cold team will also explore a number of regions as they make their way through Russia. They visited the republic of **Tuva**, which has some interesting cultural features, such as the famous throat singers.



Siberia

The largest sub-region in Russia is **Siberia**.

This could form the basis for the regional study, and also ties together the lesson plans, which are mostly based in this area.

The most obvious region to choose as a focus might be Sakha (Yakutia) which contains the city of Yakutsk as well as Oymyakon itself, and lies in the Far Eastern Federal District of Russia. This is an area that few students will know about, so a blank slate for learning can be built on over the course of a unit of teaching. There is also the city of Irkutsk which the team visited. Students could explore the way that these cities are represented in various texts, such as the Lonely Planet guide for example:

<http://www.lonelyplanet.com/russia/siberia/irkutsk>

Students could explore the varying landscape that the team passed through on their way to the region, ranging from the vastness of the **steppes** to taigas. The *Koppen climate* classification is often used to identify the borders between different biomes, and students could usefully explore the interactions of soil, geology and landscape and their connection with the vegetation that grows in an area.

The team posted a range of images on their social media feeds as they passed through contrasting landscapes, which could be used as stimulus images for further inspiration. The expanse of birch forest, or the taiga with its coniferous trees were just two of these.

The Sakha region has been described as '*a tough place for tough people*'. What makes it a tough region, and why are the people so tough?

It is part of a group of Northern governments and regions who have formed a group called the **Northern Forum** to share ideas for how to support each other in the challenges that they face through their location. What are those challenges and how does this joint action help?

Another possible area to explore is the potential for **tourism**. Despite the remoteness of the area, it is still accessible for those with the spirit of adventure. There are some flights available into the region, and the area has the potential to attract those tourists who are in need of a more adventurous location to the more mainstream resorts.

Locations such as the spectacular Kungur ice caves would have a lot more visitors if they were slightly more accessible:

<http://poleofcold.com/kungur-ice-caves/>



Not only is the North a land of raw and majestic beauty that has inspired generations of authors, artists and adventurers, and not only is it the home to a rich culture shaped through the millennia by the wisdom of Aboriginal people, but it also holds the potential to be a transformative economic asset for the country.

Stephen Harper, Canada's PM 2009, Iqaluit, Nunavut. Statement on Canada's Arctic Foreign Policy, 2010

The RGS's Passport to the Poles resource has some useful additional information on the area of the sub-Arctic:

Most of the land surrounding the Arctic Ocean is a subarctic environment. Much of the surface is current with tundra vegetation, a mat of low-growing shrubs, grasses, mosses and lichens. Below the surface layer of soil the ground is permanently frozen, known as permafrost. The surface layer is frozen in winter, but thaws in summer; because of the frozen layer below, water cannot drain away easily, so the surface is often boggy and will very slowly move down slopes. Because it is easily moved, the surface area is called the active layer.

The tundra areas with underlying permafrost are found in Alaska, northern Canada, areas of Greenland not covered by the ice sheet, northern Scandinavia and northern Russia. As with the High Arctic, these areas are warming more than elsewhere in the world. Already warming is resulting in longer summers; plants are flowering earlier and birds lay their eggs earlier.

The most important effect of global warming in these areas is the melting of permafrost, ground which has remained frozen for thousands of years. Once permafrost begins to melt it is as if the 'glue' holding the ground together is removed and so the ground becomes unstable. In permafrost areas many buildings are constructed on stilts, which pass through the surface's active layer and rest on the permafrost. Other buildings rest on concrete platforms underlain by 2m thick gravel pads, so that no thawing will take place underneath them. Roads and aircraft runways also rest on thick gravel pads for stability. If permafrost melts, buildings and roads will no longer rest on a solid base and will sink unevenly, tilt or even slip down slopes. Rivers and coastal waves will erode unfrozen ground much more quickly.

The melting of permafrost also has a more serious long-term effect. Many areas of permafrost, especially huge areas of Siberia in Russia, consist of frozen organic matter-frozen bogs containing remains of thousands of years of plant life. When these frozen bogs melt, large quantities of the greenhouse gases carbon dioxide and methane (a product of the decayed vegetation in the bogs) are released into the atmosphere. A molecule of methane is about 20 times as effective as a greenhouse gas than a molecule of carbon dioxide. Therefore the process of global warming is accelerated by the melting of permafrost.

Documents

<https://www.gov.uk/government/publications/national-curriculum-in-england-geography-programmes-of-study>

Additional weblinks



Profile of Sakha Region from Scott Polar Research Institute:

<http://www.spri.cam.ac.uk/resources/rfn/sakha.html>

Northern Forum website: <http://www.northernforum.org/index.jsp>

A useful range of maps and graphics for the Arctic:

<http://www.grida.no/graphicslib/tag/tundra>

Independent Article

<http://www.independent.co.uk/travel/europe/yakutsk-journey-to-the-coldest-city-on-earth-771503.html>

Arctic Human Development Report: although dating from 2004, Chapters such as Chapter 3 contain useful additional mapping and context:

<http://www.svs.is/AHDR/AHDR%20chapters/English%20version/Chapters%20PDF.htm>

RGS-IBG Passport to the Poles:

<http://www.rgs.org/OurWork/Schools/Teaching+resources/Key+Stage+3+resources/Passport+to+the+Poles.htm>