Royal Geographical Society with IBG

Lesson 1: Russia, Europe, Asia and the Ural Mountains

| Locational Knowledge | Place Knowledge | Key questions and ideas | Teaching and learning activities | Resources |
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| Russia has 14 neighbours. Stretching from coast to coast, Russia has one foot in Europe and the other in east Asia. Russia is home to the continental divide: the Ural Mountains. | Russia is an enormous country, twice the size of the USA and 70 times the size of the UK. Russia is where the Ural Mountains are found. | How big is Russia? Where does Europe end and Asia begin? How old are the Ural Mountains and how were they made? How does the theory of plate tectonics work? What was Pangaea and when did it exist? What is 'Eurasia'? | STARTER: How big is Russia? The PowerPoint shows different ways of thinking about the size and scale of the world's largest country. A series of cryptic numbers are shown, and students must guess their meaning. MAIN ACTIVITY: (1) Mapping Russia Students will add scale, North arrow and key features to an outline map of Russia (2) Where Europe ends and Asia begins: the Ural Mountains The movement of plates 250-300 million years ago resulted in collision and uplift. Students will be guided through the basics of tectonic | Downloads: How big is Russia? (PPT) Eurasia (PPT) Main activity (PPT) Making a map (PDF) The story of the Urals (PDF) Teacher notes PDF MSWORD Images: Ural Mountains photos from UNDP website Links: UNDP website (images) BBC Bitesize (tectonics) Assessment opportunities As classwork, students must |
| Human and Physical Geography | Geographical Skills and Fieldwork | | theory and will explore the sequence of events that led to the formation of the Urals and Russia. The analysis of | complete a map and must also arrange the sequence of Earth story images in the right |
| Understanding how are the Ural Mountains, and Russia herself, are the product of tectonic movements over geological timescales (Permian, Triassic, Jurassic). Understanding how physical processes operating in the distant past have played a key role in shaping territorial , political and cultural maps of the present, specifically, the divide between Asia and Europe which Russia straddles. | Map making (the essential elements of a map). Sequential image analysis (analysing a series of historical reconstructions of the Earth's land masses over 300 million years). | | tectonic maps and movements comprises the main activity for students, augmented by photographs of the Urals today. PLENARY: What is 'Eurasia'? In geography, the word Eurasia can be used instead of 'Europe and Asia', helping us to understand Russia's location in the world. Eurasia is the focus of a brief concluding <i>PowerPoint</i> presentation. | order |

Web links: https://www.flickr.com/photos/undpeuropeandcis/8100048841/ (UNDP) http://www.bbc.co.uk/bitesize/ks3/geography/physical_processes/plate_tectonics/revision/3/ (BBC)

Lesson 2: Russia's big biome map

| Locational Knowledge | Place Knowledge | Key questions and ideas | Teaching and learning activities | Resources |
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| Russia stretches from the Steppes of Eurasia as far north as the Arctic Ocean. | Russia is an enormous country, resulting in a high level of ecological and landscape variation. This ranges from hot deserts to polar desert. Russia claims ownership of parts of the Arctic Ocean. | What is a biome? How many different biomes are there in Russia? How does the environment and landscape vary between Russia's biomes? Why does vegetation change with latitude and latitude? What is the difference | STARTER: What is a biome? This may be an entirely new concept for learners, or a reminder of previous study. The key aspects of the global climate- vegetation relationship are outlined (<i>PowerPoint</i>). MAIN ACTIVITY: (1) Vegetation and landscape characteristics Students develop analytical skills by describing the characteristics of each biome. (2) Traversing Russia's biomes Students work | Downloads: What is a biome? (PPT) Russia vegetation zones (PDF) Arctic ambition (PPT) Teacher notes PDF MSWORD Images: UNDP photographs Links: Arctic Council |
| | | between hot deserts and polar deserts?✓ What is permafrost? | creatively to produce an account of a journey through Russia's varied physical environment. | Assessment opportunities Two classwork exercises can |
| Human and Physical Geography Understanding the important interconnected ways in | Geographical Skills and Fieldwork Making use of a variety of maps in order to describe the | ✓ What is the tree line? ✓ Who lives in Russia's extreme environments? | (3) Changing climate, changing biomes There are predicted changes in the position of the tree line in northern Russia. Students will consider what the implications | be completed as formal assignments (describing vegetation characteristics; imagining a journey across Russia). |
| which the different vegetation and plants found in different parts of Russia interact with other aspects of geography, such as the climate , under the influence of latitude and altitude . Understanding how a changing climate could have systemic effects for the vegetation and landscape in different parts of Russia. | maps in order to describe the main features of the distribution of major biomes across Russia. Identify the defining characteristics of different biomes and landscapes and places . | How might a changing climate bring change, opportunity and challenges? | are for the tundra environment. PLENARY: Russia's Arctic aspirations A Russian flag was recently planted on the sea floor of the Arctic. This prompts discussion of how marine environments and ecosystems also form part of Russia's territory, but these environments are changing and their ownership is contested (<i>PowerPoint</i>). | A Google Earth extension activity could easily be designed, allowing students to research and incorporate their own findings to augment the provided resources There is a stretch/challenge opportunity for students to find out more for themselves about the geopolitical issues associated with the shrinking of Arctic sea ice. |

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Russia's Regions and Roles

Lesson 3: Russia is the home of soil science

| Locational Knowledge | Place Knowledge | Key questions and ideas | Teaching and learning activities | Resources |
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| Different opportunities for agriculture are linked to the soil types found in different locations. The Russian Steppes are an important location for cereal-based agriculture. | Climate and soil characteristics vary widely within Russia. Russian geographers undertook the groundwork that underlies much of our modern soil science. Many of the names we use for soils, such as chernozem and podsol, are Russian in origin. Russia is a truly diverse place in terms of its physical characteristics (soil, vegetation, climate, landscape). | Why is Russia regarded as the home of soil science? What is soil? What are the main soil types? Why do soil characteristics vary from place to place? What is evapotranspiration? How are climate graphs | STARTER: What is soil, and why is Russia the home of soil science? The PowerPoint gives an introduction to soil science and a potted history of soil studies in Russia in the 1870s, with photographs of notable Russian geographers (Dokuchaev). MAIN ACTIVITY: Transect mapping of soil, vegetation and climate Russia's sheer size brings enormous variability in its soil characteristics. Russia's soil scientists deduced the key | Downloads: What is soil? (PPT) Russian soils (PDF) A postcard from Russia (PPT) Teacher notes PDF MSWORD Images: Soil profiles (wiki) |
| | | used? ✓ What is a transect and | link between climate and soils at a global (non-local level). Critically, the balance | Assessment opportunities Students will fill in the missing |
| Human and Physical Geography Understanding the physical characteristics of soil (weathered parent material and organic matter). Understanding how water movements (precipitation and evaporation) give rise to soil forming processes and soil type variation (podzol, chernozem, gley), with reference of theories of soil formation. Developing a sense of scale. | Geographical Skills and Fieldwork Climatic data analysis (describing annual variations in temperature and precipitation). Photographic analysis of soil types (identifying depth, colour, horizons). Transect mapping (using a transect as part of a sampling strategy for soils). | why is it useful for fieldwork? | between rainfall and evaporation determines whether rainwater leaches nutrients out of the soil, or draws them towards the surface. Changes in soil type and character can be observed along a transect drawn through Russia, changing in tandem with the climate. Implications for agriculture are considered. PLENARY: What would a postcard home from Russia look like? Concluding their look at the hugely varied physical geography of Russia Lessons 1-3, students consider what pictures or images best sum up Russia. | Students will fill in the missing gaps of an incomplete A3 poster showing a transect through Russia illustrating changes in rainfall, temperatures and soil type. Students will complete a postcard from Russia. |

Lesson 4: Russia is a powerful place

| Locational Knowledge | Place Knowledge | Key questions and ideas | Teaching and learning activities | Resources |
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| Russia's boundaries - and name - have changed three significant times since the 1700s, with important effects for its neighbour states, most recently Ukraine. Some would argue that throughout history, Russia has surrounded itself with satellite states in order to build a 'buffer zone' between Europe and Russia. Other locations around the world have been impacted on by Russian wealth, power and influence, most recently London. | As a place. Russia has been characterised in varying ways over time. Firstly, as a great Imperial power, then as a cold war superpower, and most recently as one of the BRIC group of economies. Students will compare boundaries of the Russian Empire , the Soviet Union and today's Russia - more properly called the Russian Federation . Russia is also a place that has influenced culture on a global scale through its art, literature and sporting prowess, amongst other ways. This has contributed to the soft power of Russia as a past and present superpower. | What do we know about Russian culture? What was the Cold War? How has the Russian territory changed over time? What different kinds of geopolitical influence can one country have over others? What are hard and soft power? What happened in Ukraine in 2014? What is a satellite state? | STARTER: From Russia With Love A PowerPoint presentation that shows how the Cold War influenced popular culture (James Bond, the space race, etc) and brainstorming even more long-established ways in which Russia has influenced global culture (ballet, literature, music, etc.) MAIN ACTIVITY: Mapping Russian power and influence Using a set of resources ('Russian revolutions' PP and maps), students analyse the extent of (i) the Russian Empire pre- 1917 (ii) the Soviet Union at the height of the Cold War (iii) Russia's main trading partners today (including the | Downloads: From Russia with Love (PPT) Russian revolutions (PPT) Russian maps (PDF) Moscow on Thames (PPT) Teacher notes PDF MSWORD Images: Flickr images of Russian culture Links: James Bond images Assessment opportunities In this lesson, they will look for signs of continuity and change in the geopolitical |
| Human and Physical Geography | Geographical Skills and Fieldwork | | Eurasian Economic union). Both change and continuity become evident. A brief | map of Eurasia. They will require an atlas to complete the series of classroom |
| Understanding the global geopolitical significance of Russia, and the way this has changed over time. Understanding the varied ways in which countries can project influence in the world, through soft (cultural) power and hard (military) power. Understanding how political processes shape geography, notably through Russia's period of Communist rule | Using cartographic evidence to identify the changes that have taken place along the border regions of Russia over time, as neighbour countries have come under the direct rule or influence of the Russian state. Finding evidence of change and continuity in the size and shape of Russia's territory (fostering students' spatial understanding). | | account is also provided of Russian intervention in Ukraine in 2014 and what is tells us about Russia's continuing influence on its satellite states. PLENARY: Russian London A brief 'who's who' of famous Russians living in London and how they have influenced life there (pushing up property prices and buying football clubs!) | exercises, which can be assessed and graded. |

Lesson 5: Russian resources

| Locational Knowledge | Place Knowledge | Key questions and ideas | Teaching and learning activities | Resources |
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| Many countries located in Europe, as well as China, depend on Russia for some or all of their fossil fuel energy supplies | Some places have fossil fuels whereas others do not. Russia has great stores of oil and gas, making it a wealthy and powerful country. These resources are controls by companies and individuals who have become enormously wealthy in the post-Soviet period. Russia's important role as an 'energy superpower' influences its relationships with other countries. | What is fossil fuel? What kinds of fossil fuel are there and why are they unevenly distributed? Who relies on Russia for their energy supplies? What is an energy pathway? How does energy dependency influence geopolitics? What is shale gas? What is a Transnational Comparting (TNO)2 | STARTER: Fossil fuels A PowerPoint presentation that gives a brief insight into different types of conventional and unconventional fossil fuel, and introduces the concept of energy pathways. MAIN ACTIVITY: (1) Russia's energy pathways Using a set of resources, students will be mapping the outflows of fossil fuels from Russia, and identifying countries with the greatest dependency on Russian energy supplies. (2) Extension activity As an extension activity, grounded in interconnected thisking, students acudd | Downloads: Fossil fuels (PPT) Russia's energy pathways (PDF) Who benefits? (PPT) Teacher notes PDF MSWORD Links: Guardian website (investigating oligarchs) BBC Bitesize (fossil fuels) BBC Bitesize (fossil fuels) In this lesson, students will be |
| Human and Physical Geography | Geographical Skills and Fieldwork | ✓ Who are the oil oligarchs? | thinking, students could investigate the link between dependency on Russian fuel and the recent drive towards | producing maps using proportional arrows and choropleth shading. This work |
| Understanding what fossil fuels are and how they are made and unevenly distributed. Understanding the global significance of Russia as an energy superpower , especially in its dealings with eastern Europe. Understanding how energy pathways and energy dependency influence geopolitical relationships. | Using a range of graphical skills , including the construction of proportional arrows and choropleth mapping . | | greater domestic energy security, via shale gas, in the EU. PLENARY: Who benefits from Russian oil? Identifying the main players in Russia's oil industry (Transnational Corporations include Gazprom) and the role fossil fuels have played in making Russia into a 'two- speed' society (investigating the 'oil oligarchy'). | can be assessed for accuracy and neatness. |

Web links: http://www.theguardian.com/news/datablog/2013/oct/09/worlds-wealthy-where-russia-rich-list (Guardian) http://www.bbc.co.uk/schools/gcsebitesize/science/aqa_pre_2011/energy/mainselectricityrev1.shtml (BBC

Lesson 6: How developed is Russia?

| Locational Knowledge | Place Knowledge | Key questions and ideas | Teaching and learning activities | Resources |
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| This lesson draws comparisons between the UK, Russia and Mexico. | Russia is sometimes grouped with emerging economies like China and India in terms of international development but this is a misleading comparison, due to its complicated history. Russia has been a powerful place, on a par with the world's most developed countries, for centuries. Russia's demographic, social and economic characteristics suggest that it should be classified as a developed country. However, it is not always a straightforward analysis. | What does development mean? What is the Human Development Index? What are the BRIC economies? What is an emerging economy? What is demography? What does a population pyramid show? How can data be ranked? How developed is Russia? | STARTER: Classifying Russia A PowerPoint presentation that looks at how Russia is viewed by other countries, as either a highly developed or 'emerging' economyDownloads:MAIN ACTIVITY: Measuring Russia's development Just as it proves hard to summarise Russia's physical geography, it is challenging to take a view on its human geography too. A set of data is provided for analysis that includes indicators of wealth, wealth distribution, life expectancy, health and other important criteria. Comparisons are provided with a range of other countries, including the UK and Mexico.Downloads:PLENARY: Top five facts about RussiaClassifying Russi development (P Top five facts at (PPT) Teacher notes F MSWORDIn this lesson, si look for similarit differences in tei international der They will also br discuss a stater | Classifying Russia (PPT) Measuring Russia's development (PDF) Top five facts about Russia (PPT) Teacher notes PDF |
| Human and Physical GeographyUnderstanding what development means and how it is measured. Development is a high-order concept, composed of many different strands.Recognising that countries are classified in varying ways, for instance as developed countries or emerging economies. | Geographical Skills and Fieldwork Using a range of different types of data that includes photographs, charts, tables, population pyramids, quantitative data and composite statistics (Human Development Index data). Ranking data in order of size. Using comparative language. Taking a viewpoint by drawing on a range of evidence. | | | look for similarities and differences in terms of international development. They will also be asked to discuss a statement. All of this work can be assessed |