

# Year 8 Geography Knowledge Booklet

Term 6  
Russia

Name:

Class:

 **Geography**



## Enquiry Question: How is Russia Geographical?

### Big questions that will help you answer this enquiry question:

1. What is the landscape of Russia like?
2. What sort of biomes does Russia have?
3. How has vegetation and people adapted to the tundra environment?
4. What is the Russian climate like?
5. What is living in Russia like?
6. What is Russia's influence on the rest of the world?
7. How is Russia perceived by the rest of the world?
8. How does Russia affect the natural environment?
9. What does the future hold for Russia?







Russia is the **world's largest single country** and makes up **10% of all land** on earth. It stretches across **11 different time zones** and borders onto three different oceans.

It **spans across two continents**—Europe to the west and Asia to the south east and is home to over 100 different languages. Crossing it by train takes 2 weeks, while by car it will around 6 days if you drive for 12 hours non stop. The climate varies across the country,

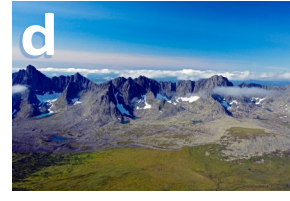
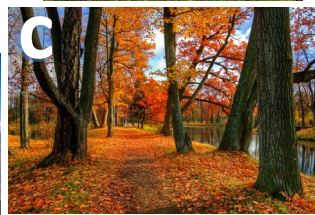
the furthest points north are freezing cold all year round—the **coldest town in the world (Oymyakon at  $-72^{\circ}\text{C}$ )** is in Siberia in the north east, while the south and west can get up to  $30^{\circ}\text{C}$  in the summer, but down to  $-30^{\circ}\text{C}$  in the winter. In the very east of the country Russia is just 2.5 miles away from the USA but 21 hours in time difference!

The **landscapes** of Russia are as **varied** as the country and it's people. The very north of the country is made up of **polar ice shelves** (picture A) and **tundra** areas while **boreal / taiga** forest with evergreen trees signal the real start of human life and economic use of the land for forestry (picture B). In the south and south west of the country, where climates are slightly warmer, more **temperate deciduous trees** can be found, these lose their leaves in autumn and create spectacular scenes (picture C).

To the west of the country are the **Ural mountains** (picture D), formed when two tectonic plates crashed together over 200 million years ago, while **Lake Baikal** (picture E) in the south of the country is found in a rift valley— created by tectonic plates moving apart.

There are also stunning **cities** in Russia—with **Moscow** (picture F) and **St. Petersburg** are big population centres and home to historical buildings and places of worship.

## Landscapes of Russia



## Boreal / Taiga Forests

**Boreal forests**—also known as **taiga** (a Russian word meaning swamping) make up the majority of Russia's land area as shown in the map to the right. These are full of **coniferous, evergreen trees** and account for **30% of all the world's forest**. These trees **grow quickly** and are home to many different types of insects which attracts hundreds of birds in the short summer period.

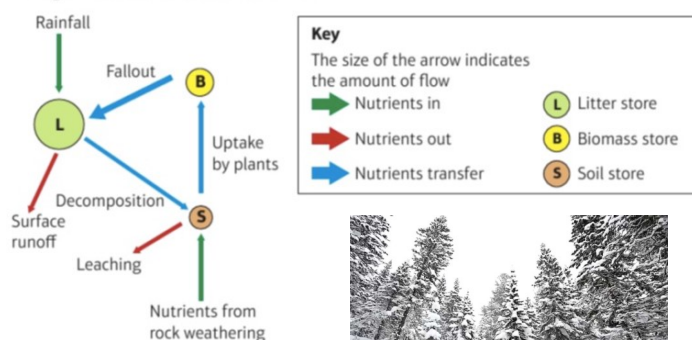
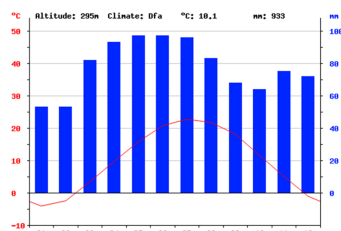


Figure 3 The nutrient cycle of the taiga



Boreal forest trees **grow close together** to gain protection from the wind, and many of the **nutrients** for the biome are **found in the litter** where leaves that do fall to the ground **fail to decompose** because of the low temperatures. There are more adaptations to the cold temperatures for humans, plant and animal life in the next section.



## Taiga Food Web



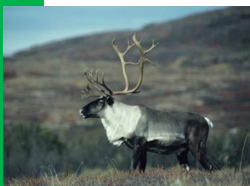
Due to the **extreme cold temperatures (abiotic factor)** in the boreal forest and very north of the country all life (**biotic factor**) has had to adapt to be able to exist there. For example people in Russia will only wear furs in order to keep warm - any synthetic materials would rip in the cold. In Oymyakon diesel has to be defrosted before cars can start (which is dangerously stupid!) Domestic heating supplies aren't turned off at all between October and April—and the local power station is manned 24/7 during these times. If the temperature drops below 55°C primary school children are not allowed out and have to sleep at school in a specially adapted dormitory (sleeping area).



Trees in the **boreal forest** have **sloped branches** that allow snow to slip off easily when it becomes too heavy without breaking the branches, and a **waxy coating** to the needle like leaves to prevent water loss in the summer and freezing in the cold winter months.



**Animals** in these cold environments are particularly well adapted—for example the **Arctic Fox** uses its **bushy tail as insulation**—it wraps this around itself to keep it warm while it sleeps. It's small ears help to reduce heat loss, while it's large eyes help it to see in the dark / minimal light. **Caribou** have **large, wide hooves** that stop it from **sinking** into the marshy soil in the spring time, and the snow in the winter and their large antlers enable them to find food in the winter by moving snow out of the way.



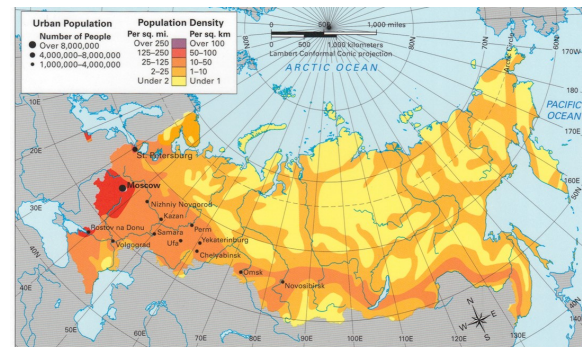
**Arctic ground squirrels** have the right idea though. It avoids the harsh winters with extreme cold and lack of food by digging an underground burrow and **hibernating** for around 8 months. During this time its body temperatures will drop to as low as  $-2.9^{\circ}\text{C}$ —the lowest of any mammal on earth, their major organs will slow down, while others shut down entirely and to the rest of the world they appear dead — yet for four months they live a perfectly normal happy



## Russia's Population

Russia's population of **145 million people** is the **9th largest in the world** but it is not evenly spread across the country. Very few people live in the north and east of the country where it is so cold. Most of the population is **concentrated** in the **south west** of the country — this area is said to be **more densely populated**—as the **choropleth map** shows but there are a number of reasons for this. For example:

- The **climate** is **warmer** in the **summer**—which makes it easier to live in
- There are **more natural resources** found in the west of the country which means there are **more jobs here** too
- These two aspects also mean that **more food** can be grown here—this is vital for a country with such a large population
- The west of the country is **better served** by international and public transport meaning people can get around this area quicker and



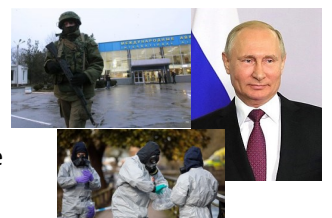
## Russia's Identity

The **identity** and **political importance** of Russia on the world stage has been **unsettled** to say the least. Between the 1700—1900s the Russian empire stretched much further than the country's borders do today. It had direct control over a number of its neighbours including (but not only!) Belarus, Estonia, Finland, Georgia, Latvia, Lithuania, Moldova, most of Ukraine, part of Poland and even Alaska until 1867.

After WW1 (1918) Russia became a **communist state** - known as the USSR— or Soviet Union of Socialist Republics. The country focussed on ensuring that **everything was shared equally** including property and money, and the **government owned** all communication, transportation, education, agriculture and industry for the good of the people. This had the **benefit** of providing for the very poorest but **taxing** the very wealthy and over time those who controlled the communist party seemed to be becoming richer and more powerful than everyone else. After WW2 (1947) the **American government became deeply suspicious** of communism resulting in a period of unrest known as the 'Cold War'. The USSR was prevented from trading with the rest of the world and became poorer as a result. By 1991 the **USSR had collapsed** and Russia was re-born as a **capitalist country**—where **oligarchs** (rich businessmen) would control much of the country.



Russia's political history since 1991 has **remained unstable** with the **invasion** of the Crimea area of the Ukraine (against international law) in 2014, supposed **interference** in the US presidential election in 2016, the **exclusion** of the Russian Olympic team from 2018 and the **attempted nerve agent attack** in Salisbury, UK in 2018 making it a political outsider once





Russia **remains important globally** because of its large access to a **wide range of energy supplies**. It is hugely important in providing **gas supplies for much of Europe** (as shown in the map to the right). In 2014 when Russia reduced the amount of gas travelling through the Ukraine towards western **Europe gas bills rose** by around 20% for the following year.

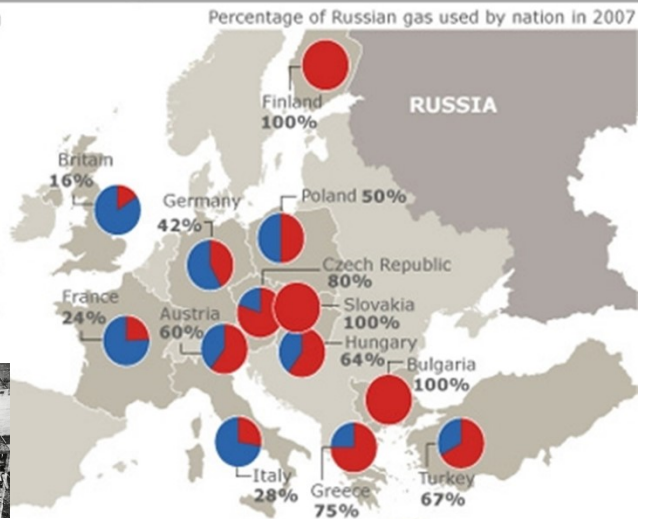
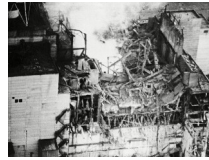
To the south east of Russia are some of its **largest energy trading partners in Japan and South Korea**. Russia exports millions of barrels of oil, mostly extracted from the north east of the country, in deepest Siberia.

In the search for more gas and oil Russia has begun **exploiting underneath the North Pole**—so much so they placed a Russian flag on the floor of the sea there—a move that **angered other countries** around the North Pole.

Russia also has plenty of access to **coal** which for many years was the main power source for its industries (see below). However since the 1980s Russia has developed its **nuclear power production**—not always successfully. In 1986 a nuclear reactor in **Chernobyl**, now in the Ukraine, **exploded** (see pictures) killing hundreds but **changing the lives of millions**. Moving forward Russia does have the potential to develop renewable energies like wind power and hydroelectric power but this is likely to reduce the amount of money made by the country.

## Dependence on Russian gas

Russia's decision to cut gas flows to Ukraine has once again highlighted Europe's needs to reduce its dependence on Russian gas, as the pricing dispute between Moscow and Kiev appears far from resolution



## Russia and Industry

Russia's main **industry** has changed a lot over the years—before WW1 it was a massive producer of agricultural products for its large population. Agriculture is a **primary industry** as it extracts raw materials from the ground.



During the **Communist era** of Russia lots of money was spent on developing **secondary industries**—these are **manufacturing industries** which make things. This included things like **steel** and **concrete** but also things to keep the population happy like cars and home appliances. **Secondary industries** involved in producing energy **remain important** to Russia today.

Since the fall of communism Russia has become more important in **tertiary (or service industries)** particularly with its neighbours and allies (it trades a lot with China, Japan and North Korea to the east and with countries in Europe to the West). One example of how Russia has become globally important is through its development and transmission of the state media broadcaster—Russia Today or RT for short. It now transmits out to eight different countries, with many more available online.

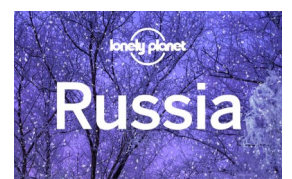
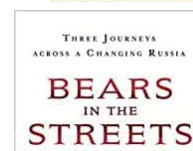
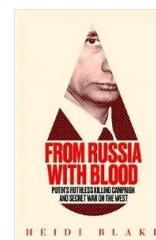
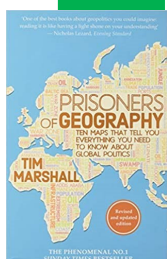


Russian **oligarchs** (rich business people), who benefitted from the selling off of the state owned communist industries have turned these into **profitable companies**—the most well known oligarch in the UK is probably the owner of Chelsea football club—Roman Abramovich but there are said to be hundreds more with many of them in the UK.

## Wider Reading List

- Fletcher, A (2018) Don't Go There: From Chernobyl to North Korea—one man's quest to lose himself and find everyone else in the world's strangest places
- Marshall, T (2016) Prisoners of Geography: Ten maps tell you everything you need to know about politics
- Richmond, S. et. al (2018) Lonely Planet Russia (Travel Guide)
- Dickey, L (2017) Bears in the Streets
- Blake, H (2019) From Russia with Blood: Putin's Ruthless Killing Campaign and Secret War on the West

that



## Enquiry Question:

# How is Russia Geographical?

### How can Russia be considered a Superpower? (8) - Model Answer

Countries can demonstrate power over other countries in two different ways—soft power and hard power. Soft power is when a country can influence other countries through its culture (like music and art) and hard power is when a country can threaten through military power. When a country can do both and influence the behaviour of other countries and this makes the country a superpower.

Russia can be seen as a superpower through its recent military intervention in the Ukraine. Through its invasion and occupation of the Crimea area by force and against the wishes of the United Nations (UN) Russia is showing the rest of the world it should not be messed with. It has followed this up with military support of nations like China and North Korea who have had run ins with the UN too.

However there is evidence to suggest that Russia is not a superpower for example much of it's power is limited to countries around it. In 2017 Russia was banned from all international competitions by the World Anti Doping Agency (WADA) after it was found that the country was guilty of faking drugs tests in the 2016 Winter Olympics. In 2018 the UK government froze millions of pounds worth of Russian Oligarch finances as punishment for their involvement in the Crimea invasion and the Salisbury poisoning incident —this has in turn stopped Russia from financing the war and invasion further.

Recently Russia has been trying to become more culturally powerful - it allowed some of it's richest treasures from it's former royal families on world tour, it has spent millions on advertising to foreign tourists, and after years of huge investment in 2008 it won the Eurovision song contest. However against this the Russian government has brought in laws against the LGBT+ community (now punishable by prison) and restricted internet access to anti government news articles and websites.

Overall I think that although that Russia has aspects of being a superpower—it's military and cultural development have made it a force to be reckoned with on the world stage. However through the actions of countries like the UK the financial and military power of Russia appears to be being held back.

The answer starts off by defining what a superpower is and the different types of power.

The use of an example helps to prove a point and brings in some of the ways Russia is showing its power.

This part provides a counter argument and develops some of ways in which Russia is not as powerful as it wishes to believe.

The use of a different example continues to develop one side of the argument giving more ways in which Russia is powerful.

A short conclusion gives the writer's own point of view.

## Homework 1 - Spellings (Term 5)

**Instructions:** You will be given a list of 10 key terms that will be used with this topic.

1. Write the definition for each term .
2. Write the word within a sentence.
3. Practice spelling the word.

You will be tested on these spellings and your understanding of what the words mean.

Due date:

### Geography Spellings:

1. Plateau
2. Mountain
3. Physical
4. Drainage
5. Pollution
6. Tundra
7. Russia
8. Environment

## Homework 2 - How Can you Encourage People to Visit Russia? (Term

Tourism to Russia has been growing since the late 1980s—however recent political decisions have reduced the number of international tourists. **Using the worksheets at the back of this knowledge organiser:**

1. Read the information about the different biomes. Highlight the main characteristics (features) of each biome.
2. Write In 50 words, a persuasive advert for magazine that could be used to promote Russia as a destination for a life-changing journey.

Due date:

## Homework 3 - Revision for mid unit test (End of T5)

**Instructions:** Revise for a mid unit test.

Due date:

You will be tested on the information and knowledge you have gained so far. Please use this knowledge organiser as a clear focus for your upcoming mid unit test. Your teacher will tell you what pages to focus on.

## Homework 4 – Cities of Russia (Term 6)

**Instructions:** Complete the questions and bar graph about the cities of Russia using the worksheet at the back of this knowledge organiser.

Due date:

1. Find and label the list of cities on the map of Russia.
2. Draw the bar graph using the data.



## Alpine (Mountain Ranges)

- The mountain ranges in Russia are not particularly large or high.
- Thin, poor soil and steep slopes means plant growth is limited and makes farming difficult.
- A continental climate means that precipitation is quite low.
- In the Ural mountains temperatures are usually fairly cold and decrease as you go higher up the mountains.
- The temperatures in the Caucasus Mountains can be hot in the summer (27°C) but cold in the winter (-3°C).
- A variety of animals including wild boar, deer and wild goat live in this biome.



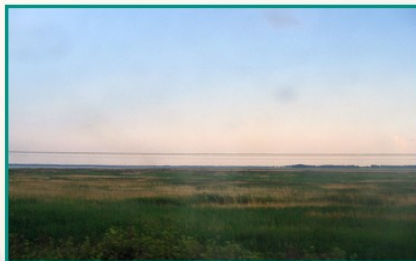
## Polar Deserts

- Found in the far north of Russia.
- Very dry (less than 250mm of precipitation a year).
- Cold summers (just above 0°C) and cold winters (-30°C).
- Windy.
- Bare rocks and gravel.
- Plants are rare (e.g. moss, lichen and algae).
- 24 hours sunlight in summer and 24 hours darkness in winter.
- Animals must adapt to the extreme conditions.



## Temperate Grasslands

- Large areas of flat grassland are known as plains or steppes.
- They have very few trees.
- The West Siberian Plain is in central Russia. It is one of the world's largest areas of continuous flatland. It contains some of the world's largest swamps and flood plains.
- Temperatures tend to be cold in winter and hot in summer.
- Temperate grasslands are too dry to allow forests to grow.
- Predators (e.g. polecats) prevent grazing animals, such as rabbits and deer, from eating all the grass.





## Tundra

- Found in northern Russia.
- Very low temperatures – below 0°C most of the year.
- Permafrost – permanently frozen ground.
- Little precipitation (usually snow).
- Vegetation is small and low e.g. grasses, lichen and moss.
- Animals must be able to survive the extreme conditions of the tundra. They include polar bears, wolverines, arctic foxes and hares.



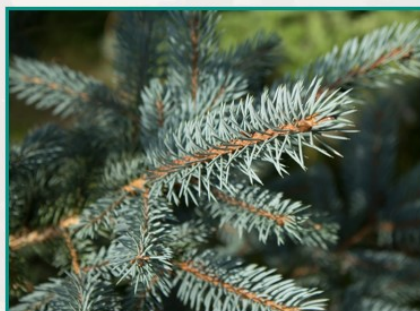
## Deciduous Forest

- Found in parts of central and south-eastern Russia.
- Mild summers and cold winters.
- Significant rainfall (up to 150mm a year).
- Four seasons; in winter, the trees will lose their leaves.
- A large variety of vegetation.
- Many different animal species including the endangered Amur tiger.



## Coniferous Forest

- Found in central Russia.
- Short, but warm summers.
- Long, cold winters.
- Low rainfall due to a continental climate.
- Trees are mainly coniferous (e.g. pine and spruce).
- Trees have needles instead of leaves (to reduce water-loss) and a conical shape (to allow snow to slide off).
- A large variety of animals, including rabbits, wolves and bears.





## Homework 4

- Find and label these cities on this map of Russia:
- These cities are in order, from largest to smallest. Add the population statistics to the table, from largest to smallest.

City	Population
Moscow	
Saint Petersburg	
Novosibirsk	
Yekaterinburg	
Nizhniy Novgorod	
Samara	
Omsk	
Kazan	
Rostov-na-Donu	
Chelyabinsk	
Ufa	
Volgograd	



Population
5 028 000
1 284 164
10 381 222
1 011 417
1 074 482
1 104 738
1 349 772
1 134 730
1 033 338
1 419 007
1 129 281
1 062 919

3. Use the completed table to draw a bar graph on the graph paper below.

A full-page sheet of white graph paper featuring a uniform grid of thin black lines. The grid consists of small squares, typically used for drawing or technical work. There are no margins, text, or other markings on the page.

4. What reasons do you think there are for the distribution (spread) of cities in Russia?

[illegible]

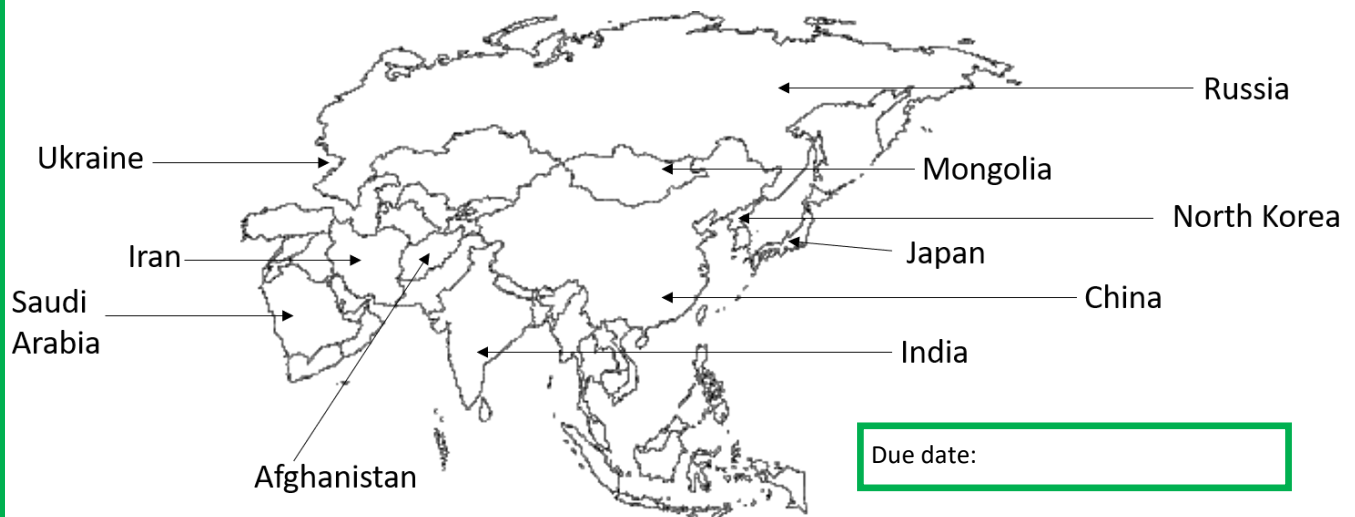




## Homework 5— Geographical Literacy (T6)

**Instructions: Using the map below you need to learn the spelling and location of 10 countries around Russia.**

- You should practice on the three blank maps in your homework booklet for a quick quiz in lesson where you will be given a blank map and 10 minutes.
- One marks for location, one marks for spelling. There will be house



Due date:

## Homework 6— Revision for end of topic test (End of T6)

Due date: