

## Russia

### Lesson 1: Physical Geography of Russia

#### ESSENTIAL QUESTION

*How does geography influence the way people live?*

#### Terms to Know

**upland** high land away from the coast of a country

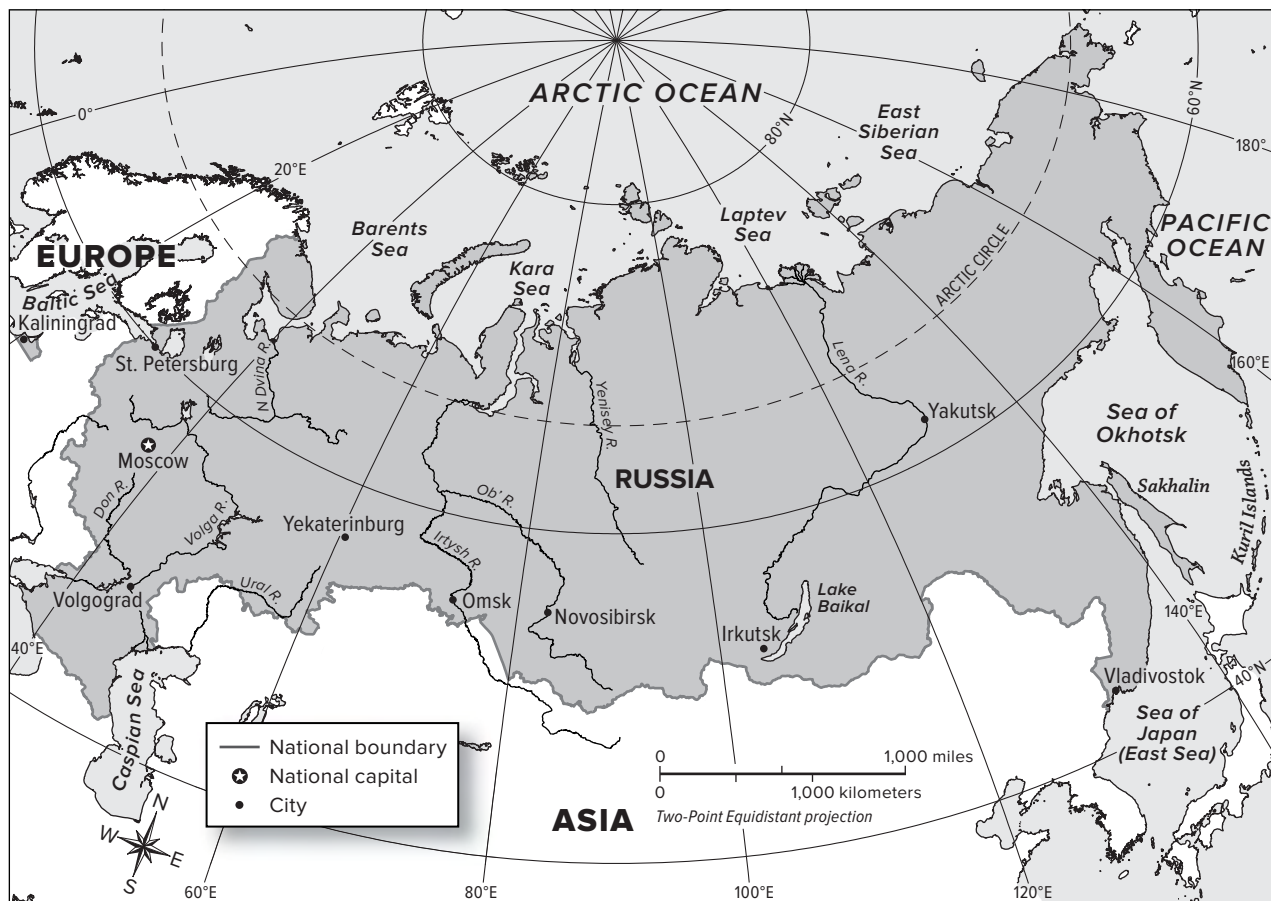
**tundra** a flat, treeless plain with permanently frozen ground

**lichen** a plant-like organism that consists of an algae and a fungus

**permafrost** the permanently frozen lower layers of soil found in the tundra and subarctic climate zones

**taiga** a large coniferous forest

### Where in the World: Russia



## Russia

Lesson 1: Physical Geography of Russia, *continued*

## Landforms

**Guiding Question** *In what ways have the landforms and waterways in Russia shaped the region?*

Russia is the largest country in the world. It covers 11 time zones. The western part of Russia lies within Europe. The eastern part of Russia, called Siberia, is in Asia.

Western Russia is mostly plains. The largest plain is the Russian Plain. It rises to form the central Russian upland. An **upland** is an area of high elevation. Most of Russia's people and cities are found in this area.

South of the Russian Plain are the Caucasus Mountains. East of the plain are the Ural Mountains. They stretch north and south and form a boundary between Europe and Asia. They are up to 250 million years old and greatly eroded.

The West Siberian Plain extends east from the Ural Mountains to the Yenisey River. It is one of the world's largest and flattest plains, with swamps and marshes.

In the heart of Siberia is the Central Siberian Plateau. This vast upland area extends from the Yenisey River to the Lena River. The eastern third of Siberia is a mountainous region that extends south along the border with Mongolia.

Russia has a long northern coastline along the Arctic Ocean, but most of its coastal waters are frozen for much of the year. The Black Sea in southwest Russia gives Russian ships a warm-water route to the Mediterranean Sea.

The Caspian Sea, also in southwest Russia, is the largest inland body of water in the world. It is actually a saltwater lake. In southeastern Siberia lies Lake Baikal, the world's deepest freshwater lake.

## Rivers of Russia

Volga	Flows south into Caspian Sea Most important waterway in Russia Carries the most freight and passenger traffic
Ob', Yenisey, Irtysh, and Lena	Flow north across Siberia Empty into Arctic Ocean Flood in spring
Amur	Flows east, forming Russia-China border



## Marking the Text

1. Highlight the names of the plains in Russia, underline the mountain ranges, and circle the name of the vast plateau.



## Identifying

2. Where do most of Russia's people live?

---



---



## Identifying Cause and Effect

3. Why is the Black Sea especially important to Russia?

---



---



---



## Reading Progress Check

4. Which river is Russia's most important waterway, carrying more freight and passenger traffic than any other river and its tributaries in Russia?

---

## Russia

Lesson 1: Physical Geography of Russia, *continued*

## Defining

5. What is *permafrost*?

---



---



---



## Marking the Text

6. Read the text on the right. Highlight the names and definitions of two zones of vegetation in Russia.



## Drawing Conclusions

7. In general, what happens to temperatures as you move from north to south in Russia?

---



---



## Reading Progress Check

8. Why is Siberia the least densely populated region of Russia?

---



---



---



---

## Climates

**Guiding Question** *What climates are found in Russia?*

Russia has many different climates because of its large size. Farthest north the climate is polar. The land is covered in ice year-round.

In northern Russia, winters are very cold and summers very short and cool. Summer in the **tundra**—a treeless zone—lasts only two months. This is a harsh environment of bare, rocky ground with patches of small shrubs, mosses, and **lichens**. A layer of permanently frozen ground called **permafrost** lies beneath the surface soil and rocks.

Much of Siberia has a subarctic climate. Summers are short and cool. Eastern and central Siberia have some of the coldest winters on Earth. Heavy snows fall on the West Siberian Plain, but elsewhere snowfall is light. A vast **taiga**—a zone of coniferous forest—covers much of Siberia. It is swampy because it, too, has permafrost.

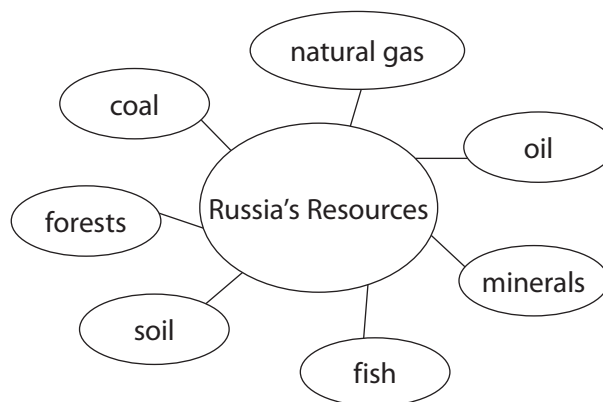
Western Russia has mostly a humid continental climate. Summers are warm and rainy; winters are cold and snowy.

Parts of southern Russia have dry grasslands called steppes. Winters are shorter than in the north but are cold. Summer is hot and dry. The region around the Caspian Sea and the Black Sea has cooler summers and warmer winters.

## Natural Resources

**Guiding Question** *What natural resources are found in Russia?*

Russia has abundant natural resources. Siberia holds some of the greatest wealth in natural resources on Earth, but its land and climate can make it difficult to obtain them.



Only about one-sixth of Russia's land has soil suitable for agriculture. Most is in western Russia.

## Russia

### Lesson 1: Physical Geography of Russia, *continued*

However, more than one-fifth of the world's forests are in Russia. Lumber, paper, and cardboard are important products of the forestry industry.

Most of Russia's vast coal, oil, and natural gas are in Siberia. Russia's coal and rich deposits of iron ore fuel the country's steel industry. Steel is used to make machines that build Russia's automobiles, railroads, ships, and many other consumer products.

Fields in the tundra and taiga of Siberia's Ob' River basin make Russia a major provider of oil and natural gas. These two fuels are also found in the Caspian Sea region.

The Urals hold important minerals, such as copper, gold, lead, and nickel, but eastern Siberia holds most of Russia's gold, lead, and iron ore. The tundra region near the mouth of the Yenisey River is a leading producer of nickel and platinum.

Russia's long coastlines and access to the Atlantic and Pacific Oceans make its fishing industry an important part of the country's economy. Russia produces about one-third of the world's canned fish and about one-fourth of the world's fresh and frozen fish.



#### Marking the Text

9. Read the text on the left. Highlight nine fuel and mineral resources in Russia.



#### Reading Progress Check

10. Why are Russia's mineral industries so important to its economy?

---



---



---



---



---

## Writing

### Check for Understanding

1. **Narrative** Suppose you are traveling from west to east in Russia. Describe the landforms and vegetation that you see.

---



---



---



---

2. **Expository** In what ways is Siberia important to Russia?

---



---



---