Mapping Russia's vegetation zones

Royal Geographical Society with IBG

BIOME is the name for a vegetation zone that can be mapped on a global scale, as shown below. Russia is such a large country that it contains several world biomes. In contrast, the UK is shown on the map as being home to just one single biome, due to its relatively small size. Can you identify which?

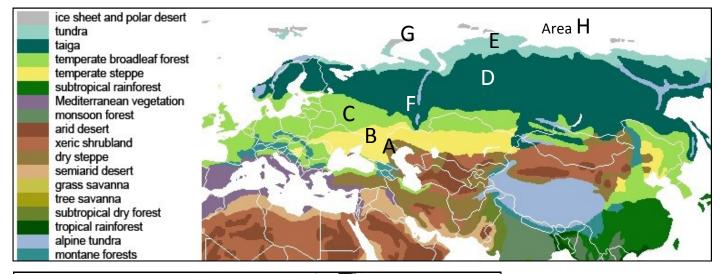
Each biome has its own characteristics. When studying a photograph of a biome, you can try to identify and describe:

- The dominant type of vegetation and its height
- Other plant characteristics such as colour
- Variations in the type of vegetation (perhaps the image shows the boundary between two biomes)
- Whether the plants are **densely** or sparsely distributed (are they close together or spread apart?)
- Other relevant landscape features such as the presence or rivers

LATITUDE (distance from the equator) is the most important reason why biomes change as you move northwards in Russia. Broad changes in **annual temperatures and rainfall** determine what kinds of trees or grasses can grow. Trees struggle to grow in parts of southern Russia due to **aridity** (lack of water). In northern Russia, growth stops at the **tree line**, beyond which it is too cold for trees to survive.

Russia's biomes have Russian names that you may not be familiar with:

- Grassland is sometimes called steppe
- Coniferous or boreal forest is sometimes called taiga





Identify **seven** global biomes that are found in Russia.

B......

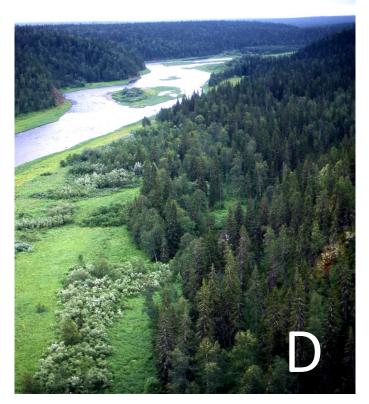
C.....

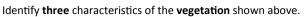
D.....

E....

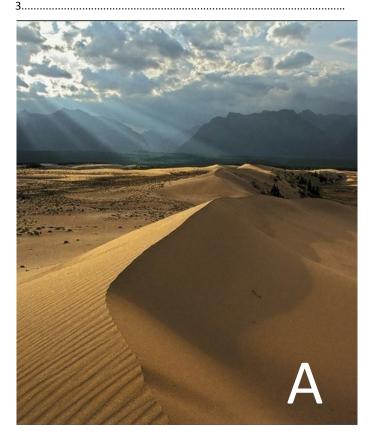
F....

Three Russian cities are shown on the map (left). What kind of vegetation was originally found at the site of each city?





,	
1	
2	
3	
Identify three characteristics of the landscape shown below.	
1	
3	



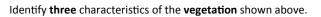


Identify **three** characteristics of the **vegetation** shown above.

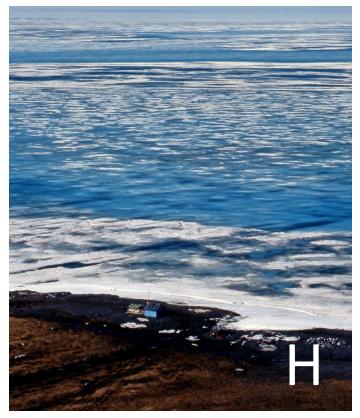
1
2
3
Identify three characteristics of the vegetation shown below.
1
2

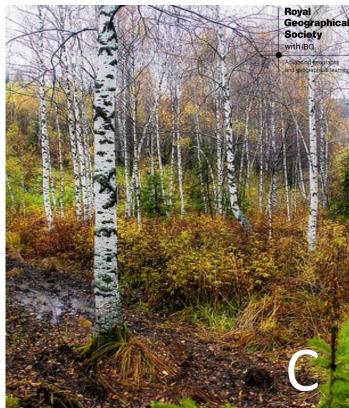






1
•
2
3
Identify three characteristics of the landscape shown below.
1





Identify **three** characteristics of the **vegetation** shown above.

1
2
3
Identify three characteristics of the landscape shown below.
1
2
1







People you might meet

People can be found living in all the cold regions of the Arctic Circle. Russia's coldest regions show evidence of long-term settlement, despite the challenging environmental conditions found there. In central Russia, you will find nomadic reindeer herders called the Khanty people. They are part of an even larger ethnic group called the Inuit who are spread throughout the Arctic Circle in Canada, Alaska, Russia and Scandinavia. These photographs show:

- boys from the Taymyr region http:// en.wikipedia.org/wiki/Lake_Taymyr
- women from the Nenets region http://en.wikipedia.org/wiki/ Nenets_Autonomous_Okrug

Written assignment

Using all of the resources, describe the journey taken from Vladivostok to St Petersburg shown on page 1. In your account, you could refer to:

• The changes in climate, vegetation and the landscape

People you might meet along the way

• Problems you might encounter in travelling and how you might over come them (an aeroplane might help!)

Russia's changing Arctic environment

Royal Geographica Society with IBG

CLIMATE CHANGE is affecting northern areas of the world. Recorded temperatures at high latitudes are rising faster than in other places. Many scientists expect to see the tree line moving further north. Using the map and photograph below, suggest how the distribution of boreal (coniferous) forest could change in future decades and how the environment shown in the photograph might alter.

