

Summer Two: Rivers and Coasts

Why are Rivers so important?

Water

Rivers carry water and nutrients to areas all around the earth. They play a very important part in the water cycle, acting as drainage channels for surface water. Rivers drain nearly 75% of the earth's land surface.

Habitats

Rivers provide excellent habitat and food for many of the earth's organisms.

Many rare plants and trees grow by rivers. Ducks, voles, otters and beavers make their homes on the river banks. Reeds and other plants like bulrushes grow along the river banks.

Other animals use the river for food and drink. Birds such as kingfishers eat small fish from the river. In Africa, animals such as antelopes, lions and elephants go to rivers for water to drink. Other animals such as bears catch fish from rivers.

River deltas have many different species of wildlife. Insects, mammals and birds use the delta for their homes and for food.

Transport

Rivers provide travel routes for exploration, commerce and recreation.

Farming

River valleys and plains provide fertile soils. Farmers in dry regions irrigate their cropland using water carried by irrigation ditches from nearby rivers.

Energy

Rivers are an important energy source. During the early industrial era, mills, shops, and factories were built near fast-flowing rivers where water could be used to power machines. Today steep rivers are still used to power hydroelectric plants and their water turbines.

Why are Coasts so important?

Coasts are dynamic, or constantly changing, they are important ecosystems. They provide unique homes for marine plants, animals, and insects. ... Coasts help us understand natural events, such as weather and changing sea levels. During storms, coasts are the first places to be flooded.

Coasts, especially the mouths of rivers, are where valuable resources such as high-quality soils accumulate, and where people practise agriculture and a range of other resource-based industries, as well as enjoying the amenity of these places.

Coasts are important to tourism because tourism is important to a country. A tropical country surrounded by water for example would use its coasts to attract tourists. Using coasts as tour spots provides a huge boost for the country's economy and makes the most of the natural resources that a coast can provide.

Rivers



Rivers are a vital part of the water cycle on Earth. They carry water that precipitates in the mountains and hills back down to the seas and oceans. River water is freshwater and not salty like the sea. In the mountains, it is often at its cleanest and can sometimes be drunk straight from the river. Not all rivers are filled by rainwater. Some are created by meltwater - water released when glaciers or snow melts high up in the mountains. Along their course, many rivers will merge with each other or branch off in separate directions.

THE SOURCE

The source of a river is always the highest point on its course. Water always naturally flows downhill. Most rivers begin their journey in high places such as mountains or hills. They are often very small trickles at this point. Many rivers have lots of different sources - these are called tributaries. A river can be a tributary for another river. The rivers are narrower and often shallower here. They flow much faster than further downstream.

MEANDERING RIVERS

Rivers follow the path of least resistance. As they flow over the land, they erode the landscape. Eventually, this causes their course to change. Rivers change their course continually.

SAND BARS AND ISLANDS

By the time a river reaches this stage, it isn't powerful enough to carry heavy sediment such as stones. These sink to the bottom and form sand bars or islands.

THE MOUTH

The point where the river meets the ocean or sea is called its mouth. The sediment and silt often forms muddy banks here.

WATERFALL

Fast flowing rivers can erode soft rock and create waterfalls. Harder rock isn't eroded so the height and shape of a waterfall are determined by where the harder rock is in the landscape. The tallest river-fed waterfall in the world is Angel Falls (979m) in Venezuela.

OXBOW LAKES

Over time, a meandering river may erode a new, shorter path through the landscape. This can cut off what was once a bend in the river creating an oxbow lake.

Coasts



Key Questions

What are the Key Aspects of Coastlines and Rivers?

Why are many people attracted to living by Coasts and Rivers?

Can I predict what would happen to a settlement or population in relation to the location?

What are the famous Rivers in the UK and across Europe?

Why are Rivers and Coasts so important for trade and transport?

