

Mountains | **Rivers**

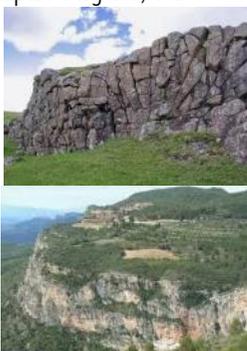
A mountain is usually defined as a part of the landscape with steep slopes that rise over 300m. Some mountains are found in **groups called ranges**, others are isolated summits. Mountains occur more often in oceans than on land; some islands are the peaks of mountains coming out of the water.

Longest above-water mountain ranges:
The Andes – South America
Rocky Mountains – North America
Transantarctic Mountains – Antarctica
 The highest mountain on the world is **Mt Everest (8850m)** in the **Himalayas** in Asia.
 Main mountain areas in the UK are:

| Mountain range | Tallest peak | Height | County |
|--------------------|---------------|--------|--|
| Pennines | Cross Fell | 893m | Durham |
| Grampian Mountains | Ben Nevis | 1344m | Highlands (Scotland) |
| Snowdonia | Snowdon | 1085m | Gwynedd (Wales) |
| Dartmoor | High Willhays | 619m | Devon |
| Cumbrian Mountains | Scafell Pike | 978m | Cumbria |
| Sperrin Mountains | Sawel | 683m | Strabane / Limavady / Londonderry (NI) |

On the physical map the **more orange/brown** an area is, the **higher** it is above sea level. On more detailed maps, **contour lines** are used to link areas of ground which are the same height above sea level. Usually, these are shown in 5 or 10m intervals depending on the level of detail the map shows. The closer the lines are together, the steeper the slope will be. The more spaced apart they are, the more gentle the slope.

- Key features**
- Face** - the "side" of a mountain
 - Foot** - the bottom of the mountain
 - Outcrop** - a rock formation visible from the surface
 - Plateau** - an area of flat, high ground
 - Ridge** - a long, narrow, high section of land
 - Slope** - an area of ground increasing in height
 - Snow line** - above here snow and ice cover the mountain all year
 - Summit** - the top of a mountain
 - Tree line** - the highest point forests are found
 - Valley** - the area of low land between mountains



Mountain formation
Fold mountains occur when tectonic plates collide. The edges of the plates crumple as they are pushed together. The rock of the Earth's surface is pushed up to create mountains.

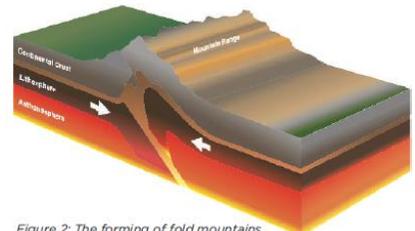


Figure 2: The forming of fold mountains.

Fault block mountains – form when cracks in the Earth's surface open up and large chunks of rock can be pushed up while others are pushed down.

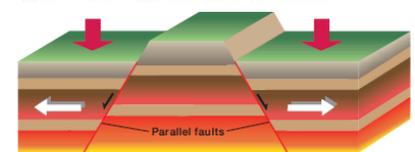


Figure 3: The forming of block mountains.

Volcanic mountains are formed around volcanoes. Volcanic mountains are made of layers of ash and cooled lava.
Dome mountains are smooth and round-looking. They are formed when magma is forced up between the crust and the mantle, but doesn't ever flow out. The magma makes the land bubble up like a balloon.
Plateau mountains form because of materials being taken away through erosion, which has left deep valleys or gorges next to high cliffs.

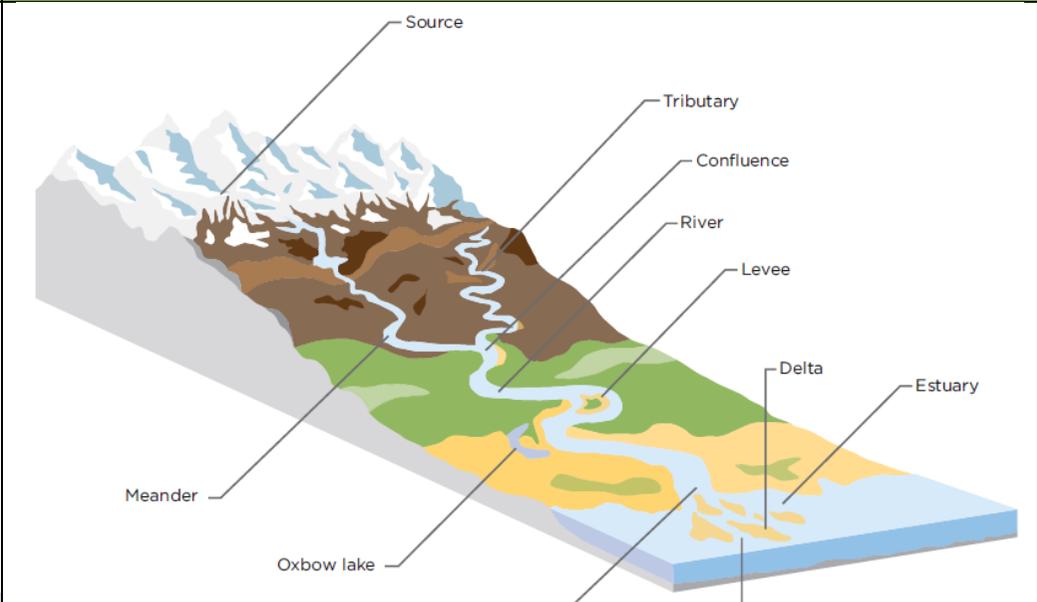


Figure 2: The river system from source to mouth.

Key words
Deposition – a river lays down or drops the sediment or material that it is carrying such as sand, mud and small stones or sticks. This happens on the inside of meanders as the water is flowing slowly.
Erosion – the wearing away by water and rocks constantly rubbing
Floodplain – flat land of the river valley close to the river banks. It is a fertile area of land used for growing crops usually found in the lower course of the river
Gorge – steep-sided river valley which is very narrow and deep most often with rocky sides
 Rivers can be divided into three parts: **upper course**, **middle course** and **lower course**.
Rapids – fast-flowing stretches of water formed where the river surface breaks up into waves because rocks are near to the surface
 Longest rivers in the world: **Nile, Amazon, Yangtze**, Yellow River, Congo River, Parana River
 Longest rivers in the UK: **Severn, Thames, Trent**, Great Ouse, Wye, Tyne, Clyde

River Lea

The River Lea, once a pure chalk stream, the centre of town life, provided clean drinking water to Luton and London, focal point for the local straw hat making industry and major engineering firms. Over time it become degraded, hidden from view in part of the town (e.g. under the Mall the river was covered and put in the tunnel) and polluted but the river has been making a good recovery over the last few years as part of a programme to re-naturalise it and reduce the pollution.
 The River Lea has its sources at a place called **Well Head** in Leagrave Park, Luton.
 As the River Lea starts its journey to the Thames, it is joined by other **tributary** streams. Before leaving Leagrave Park it is met by the **Lewsey Brook**, which rises in Lewsey Park and is itself first joined by the **Houghton Brook** from Houghton Regis. At Limbury the Lea is joined by the **Cats Brook** or Catch Brook, which rises in a garden in Icknield Way. Finally, it is met by the **Riddy Brook** from Cowslip Meadow which joins the Lea under the A6 at Austin Road. The River Lea then runs south into Hertfordshire to enter Greater London near Waltham Cross. It joins **River Thames** near the O2 Arena.

1. Where is the highest mountain in the world? a) The Andes b) The Himalayas c) The Pennines d) The Alps

2. What is the group of mountains called? a) range b) plateau c) gorge d) valley

3. What is the top of the mountain called? a) foot b) outcrop c) summit d) slope

4. Which mountain formation creates mountains with long slope on one side and sharp drop on the other?
a) volcanic mountains b) plateau mountains c) dome mountains d) fault block mountains

5. What colour are the mountains on a physical map? a) blue b) orange/brown c) green d) purple

6. Which of these can you find in the upper course of a river? a) rapids b) estuary c) floodplains d) meanders

7. Where is the source of River Lea? a) in Wardown Park b) under the Mall c) near O2 Arena d) in Leagrave Park

8. What do we call a smaller river that joins into a bigger river? a) estuary b) levee c) tributary d) confluence

9. What shape is an oxbow lake? a) round b) arc c) oblong d) triangle

10. Which of these is NOT a tributary of River Lea? a) River Thames b) Lewsey Brook c) Houghton Brook d) Cats Brook