Journey of a river

Moving water has energy. The faster it moves the more energy it has. Rivers have energy, and they can wear things down, move things and carry them along as they flow. We call this the work of the river. The faster a river flows, the more energy it has and the more work it can do. Streams and rivers alter the landscape by redistributing material through the three processes of erosion, transportation and deposition.

The start of a river is its source, which could be melting snow or ice, a spring (water bubbling out of the ground), a lake or a bog. These are all known as groundwater. The source of a river is usually in upland areas such as mountains or hills. Small streams flow downhill from the source and join other streams until they form the main river of a river system. The streams are the tributaries of the main river. In upland areas, water in streams and rivers is very fast-flowing, cutting and eroding the land to form valleys, and features such as waterfalls.

Where two streams join, or a stream joins a river, this is called a confluence. When the ground becomes flatter, the river slows down and starts to swing from side to side (meandering), making large bends (meanders). Sometimes, these large bends become cut off from the main river, and ox bow lakes are formed.

The end of a river, where it flows into the sea or sometimes a lake, is called its mouth. The area where the river meets the sea (the tidal part of the river) is called the estuary. A delta may be formed near the mouth of the river, if the land is very flat and the river is very slow-flowing and carrying a lot of sediment.