

Year 6 Afternoon Learning -

Week beginning Monday 1st February 2021

This is your themed learning for Geography:

UK and India Comparison

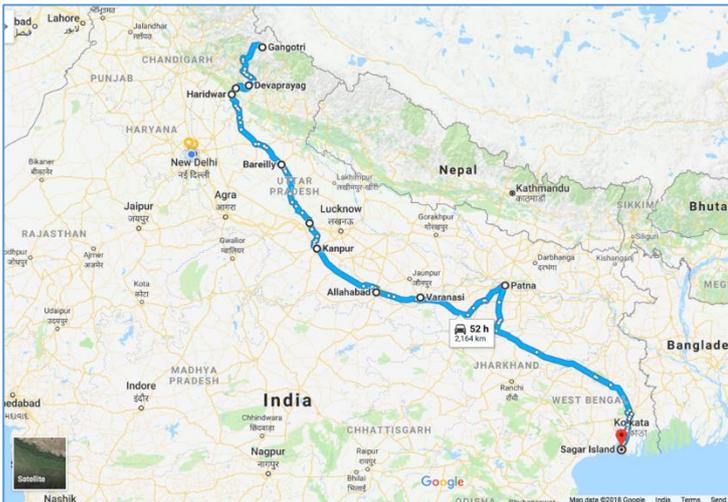
Read this information!



India- The River Ganges

The River Ganges or Ganga flows through India and Bangladesh. The 2,525 km river rises in the western Himalayas in the Indian state of Uttarakhand, and flows south and east through the Gangetic Plain of North India into Bangladesh, where it empties into the Bay of Bengal.

Aside from providing drinking water and irrigating fields, the Ganges River is extremely important to India's Hindu population for religious reasons as well. The Ganges River is considered their most sacred river, and it is worshiped as the goddess Ganga Ma or "Mother Ganges." Since time immemorial, the Ganga River has been considered the holiest of all rivers by Hindus. Ganga is also personified as a goddess and worshipped as Goddess Ganga. She holds an important place in the Hindu religion.



At its source in the Himalayas, the River Ganges, it is noteworthy that the Ganga water contains Oxygen levels 25 times higher than any other river in the world. This is one of the reasons of self-purifying attributes of River Ganga and high levels of oxygen in the waters of Ganga gives it the unique ability to remain fresh over a prolonged period of time. However, as the River Ganges winds its way alongside the large cities, it becomes heavily polluted: Winding over another 1,500 miles to the Bay of Bengal, 'Ma Ganga' eventually becomes one of the planet's most polluted rivers, a mélange of urban sewage, animal waste, pesticides, fertilizers, industrial metals and rivulets of ashes from cremated bodies. The Ganga river water is absolutely unfit for "direct drinking" and only seven spots from where it passes can be consumed after disinfection, the Central Pollution Control Board (CPCB) has said.

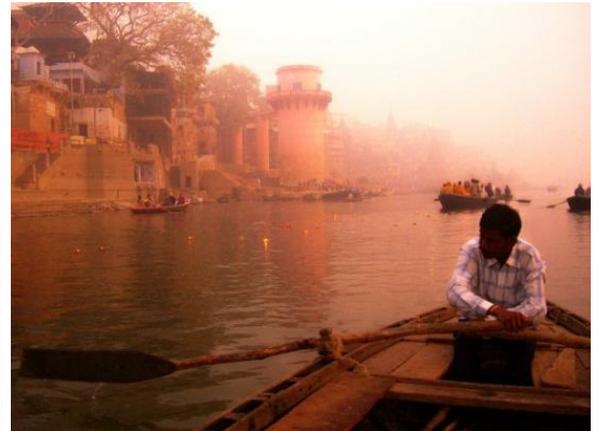
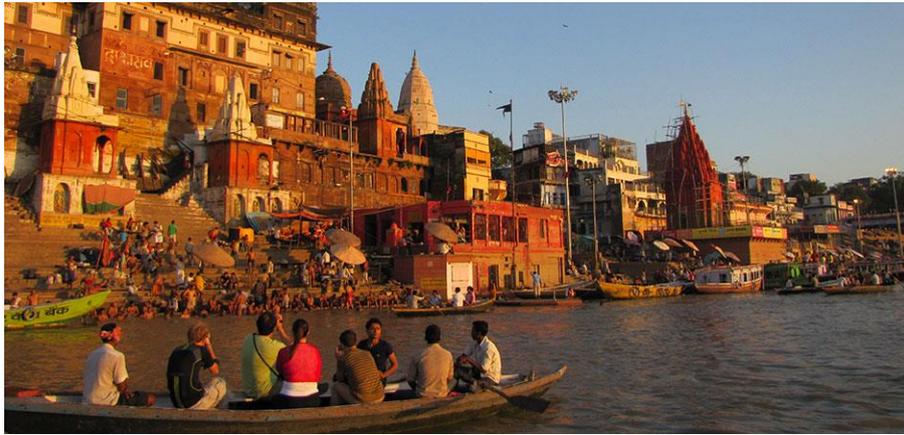
Source of the River Ganges



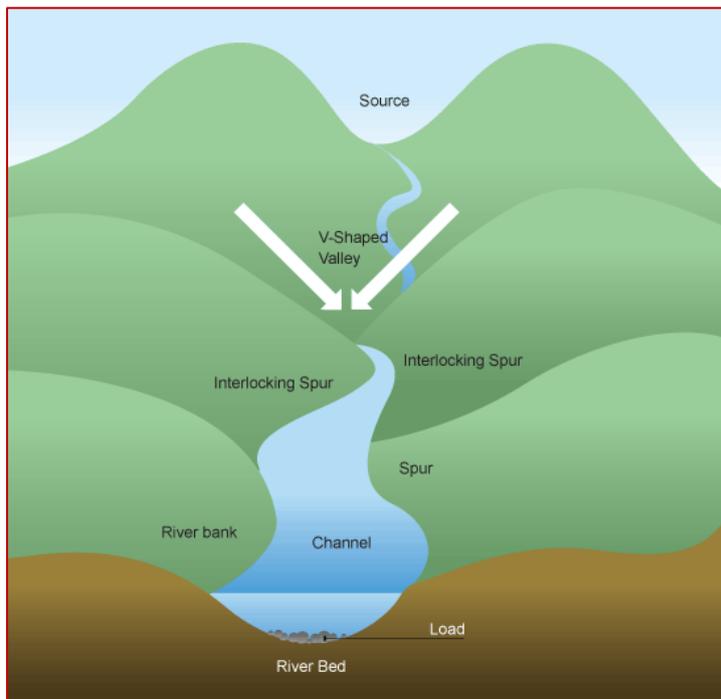
The River Ganges as it flows through Kolkata

Varanasi

Varanasi is a city in the northern Indian state of Uttar Pradesh dating to the 11th century B.C. Regarded as the spiritual capital of India, the city draws Hindu pilgrims who bathe in the Ganges River's sacred waters and perform funeral rites (cremations!). Along the city's winding streets are some 2,000 temples . . .



THE RIVER GANGES : FEATURES OF A RIVER



As the river moves through the upper course it cuts downwards. The gradient here is steep and the river channel is narrow. Vertical erosion in this highland part of the river helps to create steep-sided V-shaped valleys, interlocking spurs, rapids, waterfalls and gorges. As the river erodes the landscape in the upper course, it winds and bends to avoid areas of hard rock. This creates interlocking spurs, which look a bit like the interlocking parts of a zip. When a river runs over alternating layers of hard and soft rock, rapids and waterfalls may form.

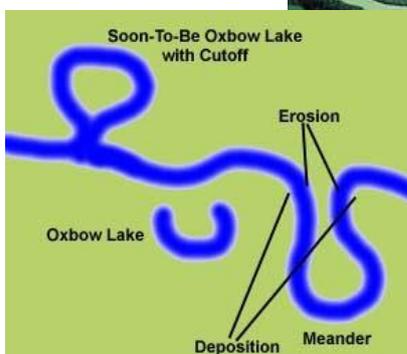
Meanders

In the middle course the river has more energy and a high volume of water. The gradient here is gentle and lateral (sideways) erosion has widened the river channel. The river channel has also deepened. A larger river channel means there is less friction, so the water flows faster: As the river erodes laterally, to the right side then the left side, it forms large bends, and then horseshoe-like loops called meanders.

The formation of meanders is due to both deposition and erosion and meanders gradually migrate downstream. The force of the water erodes and undercuts the river bank on the outside of the bend where water flow has most energy due to decreased friction.

On the inside of the bend, where the river flow is slower, material is deposited, as there is more friction.

Over time the horseshoe become tighter, until the ends become very close together. As the river breaks through, e.g. during a flood when the river has a higher discharge and more energy, and the ends join, the loop is cut-off from the main channel. The cut-off loop is called an oxbow lake.



Meanders in the River Ganges



River Ganges floodplains



River Ganges Delta

Lower course features

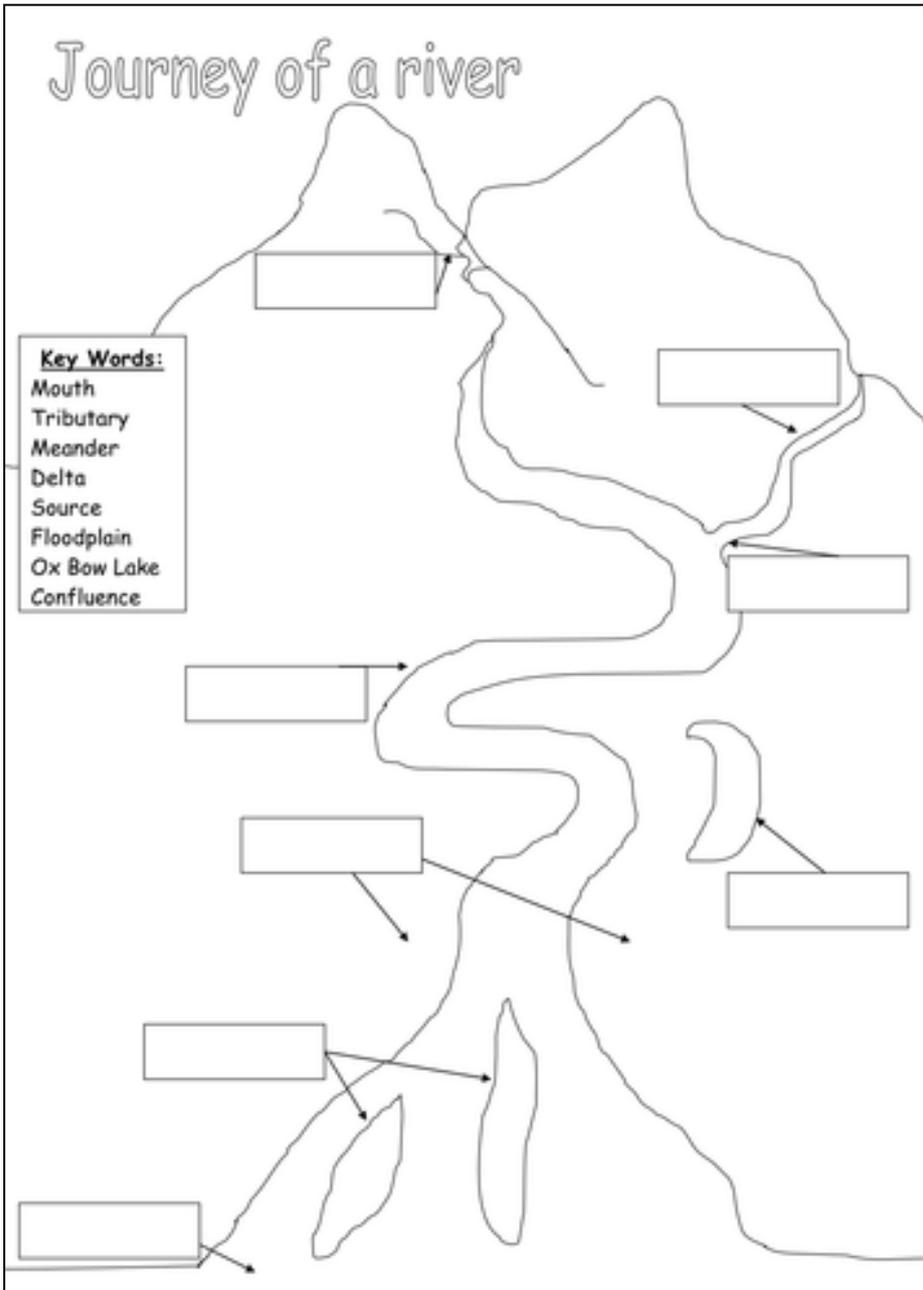
In the lower course, the river has a high volume and a large discharge. The river channel is now deep and wide and the landscape around it is flat. However, as a river reaches the end of its journey, energy levels are low and deposition takes place. Floodplains

The river now has a wide floodplain. A floodplain is the area around a river that is covered in times of flood. A floodplain is a very fertile area due to the rich alluvium deposited by floodwaters. This makes floodplains a good place for agriculture. A build up of alluvium on the banks of a river can create levees, which raise the river bank.

Deltas

Deltas are found at the mouth of large rivers - for example, the River Ganges Delta in Bangladesh. A delta is formed when the river deposits its material faster than the sea can remove it.

ACTIVITY 1: Label the features on the map below



ACTIVITY 2:

Choose from one of the following 3 activities:

1. Write your own 10 TOP FACTS about Rivers and the River Ganges.
2. Create a poster to raise awareness about how important the River Ganges is and how it needs to be given more environmental protection from pollution.
3. Write a short story or poem inspired by the River Ganges.