Explain this – How does a river change as it travels downstream?

Video summary	Before watching the video	During the video
Liz Bonnin introduces BBC archive footage of Sir David Attenborough as he follows the Amazon River downstream. Sir David explains how the characteristics of a river change and how dramatic scenery results from the erosion of rocks. He also explains how waterfalls form in the upper course of a river and meanders are found in the lower course. The formation of ox-bow lakes is also shown. Sir David references the Yellow River in China as well as other major rivers around the world. The film ends with Helen Skelton describing the confluence of the Amazon and its main tributary, the *Rio Negro* ('Black River' in Spanish / Portuguese).	Look at a map of the world to locate the Amazon and the Yellow River. Ask students to write a locational description of where they are located and which countries they run through. Students could also predict which river they believe to be longer. As a class you could also discuss rivers local to you, what landforms can students name and which course of the river are they in. A comparison could be made between a local river and the two rivers in the clip. **Introduce key terms such as:** **Rivulets:** A small stream of water. **Tributary:** A small branch river which joins onto a main river. **Turbid:** Cloudy or opaque water **Meander:** A bend in the river.	You may wish to stop at relevant points during this short film to pose questions and check understanding or wait until the end. Useful questions might include: • Describe the Amazon River. • Describe the Yellow River. • How is a waterfall formed? • What happens on the inside bend of a meander? • What happens on the outside bend of a meander? • What happens when a river is slowed? • How deep is the Amazon River in places? • How many tributaries does the Amazon River have? • Why do the two rivers not mix properly?
After watching		
Look at the full length of a river from the upper course to the lower course and the landforms that can be found such as waterfalls, gorges, meanders and deltas.		

Task students with drawing a river channel from source to mouth and label the different landforms. Students could then look at the Bradshaw Model and what is expected to happen as you move downstream – for example how the width and depth change. This knowledge could then be applied to different rivers around the world to see which rivers do fit the model. Remember, that a model is just a representation of what rivers could be like.

Create a glossary of the key terms associated with rivers, this terminology could be separated into landforms and processes.

Curriculum notes	Where next?	Links
This topic appears in Geography at KS3 (Hydrology) and KS4 / GCSE (Rivers and water) in England, Wales and Northern Ireland and National 4/5 in Scotland.	Use GIS (Geographic Information System) to visit rivers around the world and to investigate how they change from source to mouth. Tools within GIS allow you to measure the width. 3D layers can be added to show the relief of the land and enable students to see the variety of landforms in more detail.	KS3 Rivers: https://www.bbc.co.uk/bitesize/topics/zs92tfr Processes in the river: https://www.bbc.co.uk/bitesize/articles/zg6k96f River profiles: https://www.bbc.co.uk/bitesize/guides/zq2b9qt/revision/5