Year 9 Geography Unit 3 Overview-Rivers

AQA GCSE Geography Paper 1- Living with the Physical Environment

How do rivers shape the land and how should they be managed?

Lesson Overview	**Key Words**
1. How does water move through the hydrological cycle & drainage basins? 2. How do the long and cross profiles of a river change downstream? 3. How does a river shape the land through the processes of erosion, transportation and deposition? 4. How are features and landforms (waterfalls and gorges) created in the upper course of a river? 5. How are features and landforms (meanders and oxbow lakes) created in the middle course of a river? 6. How are features and landforms (deltas, levees and estuaries) created in the lower course of a river? 7. What causes floods? Physical and Human Causes - Hydrographs 8. Case study: What happened in the Boscastle flood 2004? 9. How do we manage rivers? 10. Revision and Consolidation 11. Assessment on Tectonic Hazards and Rivers 12. DIT and reflection	**Abrasion:** the pebbles wear away the bed and banks of the river channel. **Attrition:** The particles are knocked as they are transported, and they become more rounded and reduced in size. **Bedload:** the material carried by a river. **Channel:** the main part of a river, where most of the water flows. **Confluence:** the point at which rivers meet. **Tributaries:** finger-like river channels which branch away from a main river channel. **Deposition:** when a river drops off or leaves behind material. **Discharge:** The volume of water that passes a given point in a river within a given period of time (e.g. cubic metres per second) **Drainage Basin:** the area of land that is drained by a river. **Erosion:** the wearing away of the bed and banks of the river channel by abrasion, hydraulic action, solution and attrition. **Estuary:** the tidal mouth of a river, with large, flat expanses of mud exposed at low tide. **Floodplain:** flat area of land either side of the river channel. **Groundwater:** water that moves underground. **Hydraulic Action:** The force of the water eroding material from the bed and banks of the river channel. **Levées:** river embankments built up by deposition of sediment. **Load:** the material transported by a river as bedload, suspended load or dissolved load (in solution). **Meander:** a bend in a river formed by erosion and deposition. **Mouth:** where a river ends, at a lake or the sea. **River cliff:** forms on the outside of a meander bend as a result of erosion undercutting the river bank, leaving an overhanging cliff. **Saltation:** material bounced along the bed of the river. **Slip-Off Slope:** forms on the inside of a meander bend as a result of deposition in the slower flowing water building a gentle slope. **Solution:** some rocks such as limestone are subject to chemical attack and slowly dissolve in the water. **Source:** where a river starts, usually in the mountains. **Surface run off:** rain water which runs over the land surface. **Traction:** material rolled along the bed of the river. **Transpiration:** water vapour released from plants. **Tributary:** a smaller river which joins a larger river. **Watershed:** the highland that forms the edge of a river basin.
Suggested reading Fiction books: • River of Ink by Helen Dennis • Journey to the River Sea by Eva Ibbotson	**Skills** • Describing landforms • Explaining physical processes • Plotting the long profile of a river • Using an OS Map to identify river features • Plotting a flood hydrograph and interpretation/ analysis • Analysing the effects and responses to flooding