

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



**You will learn about:**

- Hydrological cycle and drainage basin
- Processes and landforms of erosion and deposition
- River management and case study

**You will be able to:**

- Explain processes and landforms
- Analyse a case study
- Use literacy (PEEL, PEAL), numeracy (graph and data skills) and map skills

<p><b>Lesson Overview</b></p> <ol style="list-style-type: none"> <li>1. Hydrological cycle &amp; drainage basins</li> <li>2. Long and cross profile of a river</li> <li>3. River processes: erosion, transportation and deposition</li> <li>4. Upper course features and landforms (waterfalls and gorges)</li> <li>5. Middle course features and landforms (meanders and oxbow lakes)</li> <li>6. Lower course features and landforms (deltas, levees and estuaries)</li> <li>7. What causes floods?</li> <li>8. Case study: Boscastle flood 2004</li> <li>9. How do we manage rivers?</li> <li>10. Assessment</li> <li>11. DIT</li> </ol>	<p><b>Key Words</b></p> <p><b>Abrasion:</b> the pebbles wear away the bed and banks of the river channel.</p> <p><b>Attrition:</b> The particles are knocked as they are transported, and they become more rounded and reduced in size.</p> <p><b>Bedload:</b> the material carried by a river.</p> <p><b>Confluence:</b> the point at which rivers meet.</p> <p><b>Tributaries:</b> finger-like river channels which branch away from a main river channel.</p> <p><b>Drainage Basin:</b> the land that is drained by a river and its tributaries.</p> <p><b>Erosion:</b> the wearing away of the bed and banks of the river channel by abrasion, hydraulic action, solution and attrition.</p> <p><b>Estuary:</b> the tidal mouth of a river, with large, flat expanses of mud exposed at low tide.</p> <p><b>Hydraulic Action:</b> The force of the water eroding material from the bed and banks of the river channel.</p> <p><b>Levéés:</b> river embankments built by deposition.</p> <p><b>Load:</b> the material transported by a river as bedload, suspended load or dissolved load (in solution).</p> <p><b>Meander:</b> a bend in a river. The outside of the meander has fastest flow, deepest water.</p> <p><b>Mouth:</b> where a river ends, at a lake or the sea.</p> <p><b>Saltation:</b> material bounced along the bed of the river.</p> <p><b>Slip-Off Slope:</b> forms on the inside of a meander bend as a result of deposition in the slower flowing water.</p> <p><b>Solution:</b> some rocks such as limestone are subject to chemical attack and slowly dissolve in the water.</p> <p><b>Source:</b> where a river starts, usually in the mountains.</p> <p><b>Traction:</b> material rolled along the bed of the river.</p>					
<p><b>Suggested reading</b></p> <p>Journey to the River Sea by Eva Ibbotson</p> <p><i>Non-fiction articles available on showbie.</i></p>	<p><b>Cross curricular</b></p> <p><b>SMSC:</b> using empathy when analysing the impact of flooding on different communities and developing an appreciation of the ways different cultures view and use rivers.</p> <p><b>Literacy:</b> to make well justified geographical decisions in terms of managing rivers, using key geographical words accurately.</p> <p><b>Numeracy:</b> analysing measurements on height and distance to draw a long profile and analysing rainfall and discharge on hydrographs</p>					
<p>Research</p>	<p>Note-making</p>	<p>Group work &amp; discussion</p>	<p>Memorisation</p>	<p>Precision &amp; accuracy</p>	<p>Independence</p>	<p>Reflection</p>