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| **Year 4**  **The Journey to the Sea**  Rivers | |
| **Links made with other subjects** | Science: States of Matter (The Water Cycle) *This should be taught alongside this unit.*  Residential: Nell Bank  Computing: Media (animation) |
| **The BIG Question** | How does a river change on its course to the sea? |
| **The BIG Outcome** | The children will demonstrate the knowledge they have learnt during this unit to create a model of a river and its different parts as it goes on its journey to the sea. This can be interactive using Stop Motion, a presentation or something similar. GD will highlight the risks to rivers e.g. Flooding/ littering/ pollution. |
| **Geography objectives**  (link to NC) | * Describe the human, physical and topographical features of the United Kingdom including rivers. * Describe and understand key aspects of rivers. * Understand geographical similarities and differences through the study of physical geography of a region in the UK and in a European country. * Use maps, atlases, globes and digital/computer mapping to locate and describe features studied. |
| **Prior knowledge**  What prior knowledge is needed for children to be successful in this unit? | *Children already know:*  Y1 – Who are we and where are we? (Knowledge about the UK and main rivers)  Y2 – Where in the world are we? (Continents and oceans)  Y2 – Is it raining or is it pouring? (UK daily weather patterns)  Y3 – Oh, I do like to be besides the seaside. (Coastlines) |
| **Future learning**  Consider the conceptual knowledge within a subject that pupils need for future learning not just the recall of facts but the importance of concepts | This unit gives prior knowledge to:  Y4 – Why settle here? (Settlements)  Y5 – Our Yorkshire. (Comparing Idle and Clapham)  Y6 – Rainforests |
| **Geographical strands** | Geographical Skills   * To use pictures, a range of maps and models to understand. * To follow maps to identify rivers and their journey. * To use four figure grid references. * To draw sketches to explain and describe. * To use models to explain and describe.   Locational Knowledge   * To use the 8 points of a compass to describe the location of features. * To locate the River Aire at different points on a UK map. * To locate the River Danube at different points on a European map.   Place Knowledge   * To know how a river changes as it continues along its course. * To know the countries the river Danube goes through. * To know the main towns/ cities the River Aire goes through.   Environmental, human and physical geography   * To know the features of rivers. * To know how a river changes over time (altering course, widening, narrowing, human changes: dredging etc) * To know the impact of rivers upon people. (flooding, transport) * To know how humans impact rivers (pollution, littering, dams, weirs) |
| **Vocabulary/ Glossary** | river, course, dams, weirs, source, meander, tributary, confluence, river channel, water shed, drainage basin, mouth, deposition, erosion, farming, irrigation. |
| **Knowledge**  (see italics for knowledge to remember) | The knowledge that children will learn and remember:   1. A river is a body of water flowing from where it falls at high ground down to the sea. It flows trying to find the lowest ground. 2. The features of the river along its course:  * Source: Where a river starts. * Tributary: Where a smaller river flows into a bigger one. * Meander: When a river winds on its course. * Confluence: Where two rivers meet. * River channel: What the river flows in. * Drainage basin: The area of land that empties its water into a river. * Watershed: The invisible line separating one drainage basin from another. * Mouth: Where the river meets the sea.  1. Describe how the land changes as the river journeys to the sea:  * Upper Course. Source: High areas (hills and mountains) where the rain falls. The water will travel downhill. Water tends to be narrow and fast running. Cuts through rocks. Often you see waterfalls. You can sometimes see rapids. * Middle Course The land becomes flatter. Often the river is flowing through a valley. The flow of water slows down. The river gets wider. The river meanders. The river drops its rocks, sand and silt so sometimes sand bars or islands are formed. * Lower Course The river meets the sea. The land is flat. the flow of water is slow. At the mouth, there is often a river delta, a large, silty area where the river splits into many different slow-flowing channels that have muddy banks. This is where you find saltmarshes and mudflats often (Y3 coasts learning)  1. Change of a river over time: 2. Erosion: The river erodes (wears away) the river bank and bed as it flows along its course. This happens most in the upper course. As it cuts through the land, it’s banks become higher. 3. Deposition: The river drops rocks, sand and silk as the flow of water slows. This happens at the bottom of the middle course and the lower course. Because land is dropped, it builds up the bank on one side so the river meanders. 4. Know the main rivers of the UK. ID on a map.  * Thames – South East England. Deepest river in Britain. Shipping boats can travel up it as far as London. * Severn – Wales into central England. Longest river in the UK. * Trent – East to central England. * Mersey - North West England. * Tay – East Scotland. * Clyde – West Scotland. * Exe – South West England * Tyne – North East England * Dee – North West England into Wales. * Bann – Northern Ireland * Ouse – York * Wharfe – Yorkshire * Aire – Our local river  1. Human impact/ Impact upon humans:   Rivers can be used for lots of good things, like: sailing boats on them to trade goods with other towns on the river, farming on land that has been made fertile by the river. Rivers can cause problems for people: when there are heavy rains and the river is very full they can be dangerous; rivers do a lot of damage when they flood.   1. Settlement along rivers.   Rivers flood. When they flood, they put the silt that they have carried from the hills on the land. This is very fertile. Farmers use the land at the side of rivers to grow on for this reason. Crops grow well. Also, they can use the water from the river forirrigation.   1. The River Danube: Starts in German in the Black Forest Mountains. Flows through [Germany](https://en.wikipedia.org/wiki/Germany), [Austria](https://en.wikipedia.org/wiki/Austria), [Slovakia](https://en.wikipedia.org/wiki/Slovakia), [Hungary](https://en.wikipedia.org/wiki/Hungary), [Croatia](https://en.wikipedia.org/wiki/Croatia), [Serbia](https://en.wikipedia.org/wiki/Serbia), [Bulgaria](https://en.wikipedia.org/wiki/Bulgaria), [Romania](https://en.wikipedia.org/wiki/Romania), [Ukraine](https://en.wikipedia.org/wiki/Ukraine). Flows into the Black Sea. 2,850km long. 2. The River Aire: Starts at Malham. Flows through Yorkshire. 148 km long. Flows into the River Ouse (confluence). 3. Similarities and differences between the Aire and Danube: Danube is much longer. Danube flows through countries, Aire only through counties. Danube flows into the Sea, Aire flows into another river.   13. The water cycle:  There are 4 main stages in the water cycle: **e**vaporation, condensation,  precipitation and collection |
| **SEND expectations** | 1. A river is a body of water flowing from where it falls at high ground down to the sea. It flows trying to find the lowest ground. 2. The main rivers in the UK are: Thames, Severn, Trent, Mersey, Tay   Thames – Deepest river in Britain. Shipping boats can travel up it as far as London.  Severn – Longest river in the UK. Starts in Wales and travels into England.  Trent – English river.  Mersey - English river.  Tay – English river.   1. Our local river is the River Aire. 2. The features of the river along its course:   Source: Where a river starts.  Tributary: Where a smaller river flows into a bigger one.  Meander: When a river winds on its course.  Confluence: Where two rivers meet.  Mouth: Where the river meets the sea.   1. A river has three course: The upper, middle and lower course. |
| **Teaching ideas/ resources** | 1. On day 1 long walk of Nell Bank incorporate some field work:   * on the stream on Ilkley Moor, children stand at one side and the other. Measure the distance. Drop a leaf into the stream and time how long it takes to travel down. On the way back, measure the same width (one side of the bridge to the other) repeat. * Compare where did the leaf move faster? Where is the river flow faster? Why do you think? Chn to consider elevation, amount of water.   2. Books: A River Marc Martin  Journey to the River Sea  The rhythm of the rain  A drop in the ocean.  The Song of the River  3. River Severn from source to mouth <https://www.youtube.com/watch?v=_M48ANM3hAQ>  4. Features of a river <https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/z7w8pg8> |
| **Suggested Teaching Sequence** | **Session One**  Points 1 and 2. Children will know the features of a river and have used models or diagrams to help them learn this.  **Session Two**  Points 3, 4, 5, 6. Children will know the land changes as a river goes to the sea. They will use key vocabulary to describe how it changes and why.  **Session Three**  Point 7. Children will know the main rivers in the UK and will use an atlas to find them.  **Session Four**  Points 8 and 9. Children will know different ways that rivers impact humans. They will know positive and negative impacts.  **Session Five**  Points 10, 11 and 12. Children will know the key facts to do with the River Aire, the River Danube and compare the two.  **Session Six**  Points 13. Children will know what the water cycle is and use models or diagrams to discuss it.  **Session Seven: Assessment** |