# Subject: Geography – Year 3, Unit 2, Rivers

***Enquiry Question:***

*Where does our water come from?*

*How do rivers affect us?*

**NC/POS:**

***Locational knowledge***

- Locate the World's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.
- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.
- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

***Place knowledge***

- Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.

***Human and physical geography***

- Describe and understand key aspects of:
- Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.
- Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

***Geographical skills and fieldwork***

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
- Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.
- Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

**Prior Learning (what pupils already know and can do):**

- Children will know of some UK rivers e.g. River Mersey, River Thames.
- Children will know the UK seas and world oceans.

**End Points (what pupils MUST know and remember):**

- Know and explain the features of the water cycle.
- Know and label the main features of a river – upper course, middle course, lower course.
- Use a key in an atlas to find rivers.
- Know the name and location of the UK's longest rivers – Severn, Thames, Trent, Great Ouse, Wye.
- Know the name and location of the world's longest rivers - Nile, Amazon, Yangtze, Mississippi, Yenisei.
- Know the source, mouth, length and some tributaries of each river named.
- Know what rivers are used for and the potential impact on their location.
- Understand why the Manchester Ship Canal was created.
- Know the effect that rivers can have on the land around them.
- Know how to use four-figure grid references.

**Key Vocabulary:** water cycle, evaporation, condensation, precipitation, surface run off, transpiration, vapour, condenses, closed cycle, upper course, middle course, lower course, flowing, channel, Waterfall, meander, tributary, confluence, flood plain, levees, delta, estuary, source, mouth, atlas, sea, ocean, physical, human, pathway, river, canal, navigate, trade, fertile land, flooding, erosion, damage, dam, four-figure grid reference.

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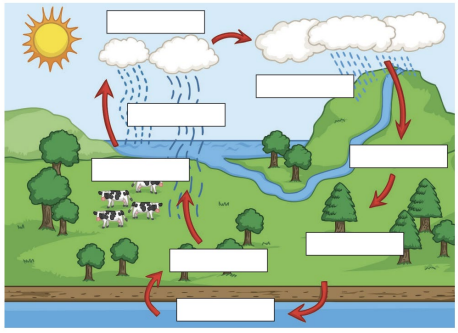
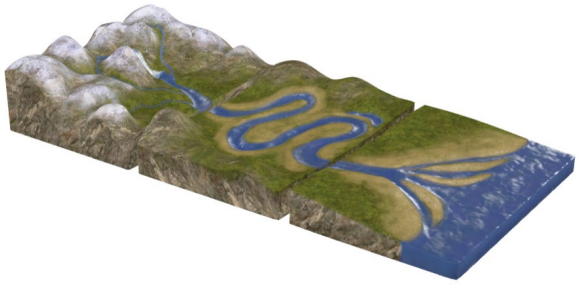
|---|---|
| **SESSION 1: Where does our water come from?**<br><br>ENQUIRY QUESTION: Where does our water come from?<br>Ask the children where water comes from:<br>• Explain that you are going to be looking at the water cycle<br>• Watch the video: https://www.bbc.co.uk/bitesize/articles/z4gfp4j#zpfjjsg<br>• Ask why they think it is called a 'cycle' - inform children that it is because it continues on and on; it has been happening since the start of time and will continue.<br>• Explain that it is a closed cycle; there is no more or less water now than at the start.<br>• Children label the stages of the water cycle and explain what happens at each stage.<br>  | **End points covered in this session:**<br><br>Know and explain the features of the water cycle.<br><br>**Vocabulary: water cycle, evaporation, condensation, precipitation, surface run off, transpiration, vapour, condenses, closed cycle.** |
| **SESSION 2: What are the features of a river?**<br><br>Recap:<br>• What is a river? A river is a flowing, moving stream of water.<br>• Is a river a human or physical feature? Why? It is a natural feature – it is not human-made.<br>• Which River runs through Warrington? The River Mersey.<br><br>Explain that geographers describe a river as having 3 sections: the upper, middle and lower course. Children label the upper, middle and lower course:<br>  <br>Look at a photograph of the upper course a river:<br>  <br>• Discuss what the children can see. | **End points covered in this session:**<br><br>Know and label the main features of a river – upper course, middle course, lower course.<br><br>**Vocabulary: upper course, middle course, lower course, flowing, channel, Waterfall, meander, tributary, confluence, flood plain, levees, delta, estuary, source, mouth.** |

- Explain that the river here is fast flowing, has a narrow channel, steep sides and steep valleys.
- Children describe this.

Next, look at the middle course:

- Discuss what the children can see.
- Explain that the river here is slower flowing, has a wider channel, with less steep sides.
- Children describe this.

Finally, look at the lower course:

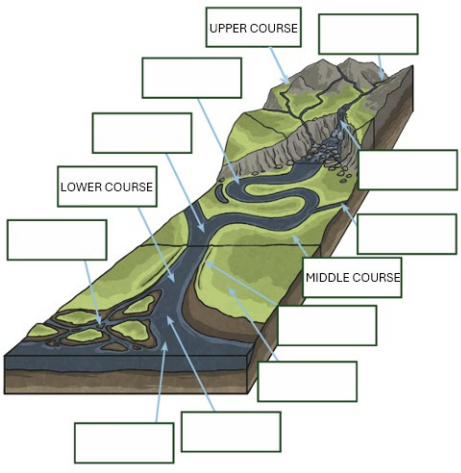
- Discuss what the children can see in comparison.
- Explain that the river here is slower flowing, deep, wide channel and less steep sides.
- Children describe this.

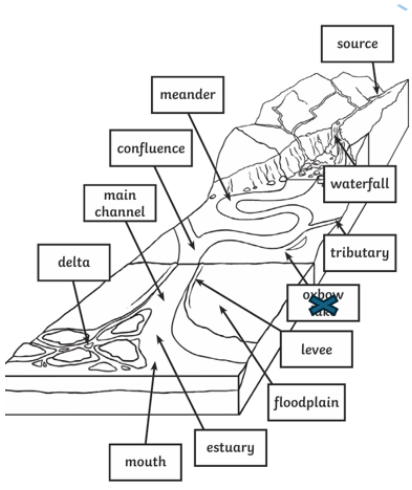
Children stick photographs of the different features of a river into their books, name and describe them (keep them in upper, middle and lower course categories):

- Upper course: waterfalls, rapids, gorges
- Middle course: meanders, tributaries, confluences
- Lower course: flood plains, levees, delta, estuary

Children label the different features of a river:

- Waterfall, meander, tributary, confluence, flood plain, levees, delta, estuary, source, mouth



**SESSION 3: Where are rivers located?**

Focus on the UK:

- Recap: Using an atlas, identify the seas and oceans around the UK.
- Recap: What is a key on a map? How do they help us? Why do we need them? Which part of the key will help us to locate a river?
- Recap the name of the start of a river (source) and end of a river that meets the sea (mouth).
- Can you find the source and the mouth of the River Thames in your atlas?
- Do all rivers flow into the sea? (No – some join up with other rivers)
- Children then use the atlas and key to name and locate rivers in the UK.

| Name of river | Sea/ocean it flows into |
|---|---|
| River Mersey | Irish Sea |

- What do they notice about where most rivers seem to start? (In the middle of the country – from higher ground)
- Highlight that some rivers are short and long

Use an atlas to identify the UKs longest rivers and identify the source and mouth for each.

- *Severn, Thames, Trent, Great Ouse, Wye*.

Children research the world's longest rivers and complete the table:

| Name of the river (longest to shortest) | Which country is it located in? | Where is the source of the river? | Where is the mouth of the river? | What are the names of its main tributaries? | How long is the river? (in Km) |
|---|---|---|---|---|---|
| Nile | | | | | |
| Amazon | | | | | |
| Yangtze | | | | | |
| Mississippi | | | | | |
| Yenisei | | | | | |

- Children then locate the rivers on a World map

**End points covered in this session:**

Use a key in an atlas to find rivers.

Know the name and location of the UK's longest rivers – Severn, Thames, Trent, Great Ouse, Wye.

Know the name and location of the world's longest rivers - Nile, Amazon, Yangtze, Mississippi, Yenisei.

Know the source, mouth, length and some tributaries of each river named.

**Vocabulary: atlas, sea, ocean.**

**Session 4: What are rivers used for?**

Look at a photograph of the River Severn and River Thames. What do the children notice?

River Severn:

River Thames:

- The River Severn is in a rural area compared to the urban area of London
- Children learn the uses of each river:
- River Thames: for transportation, hydroelectricity, sailing, commute (water-taxis)
- River Severn: watering crops and plants nearby, water supply for nearby houses, help with food supply (fishing)

**End points covered in this session:**

Know what rivers are used for and the potential impact on their location.

**Vocabulary: urban, rural, transportation, hydroelectricity, commute, water supply, food supply.**

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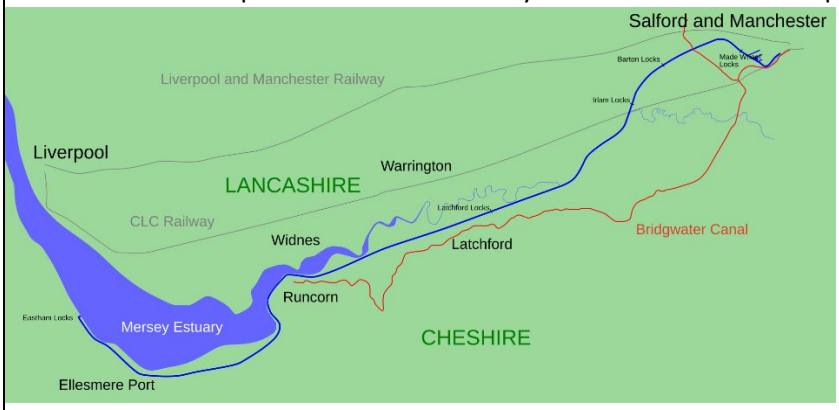
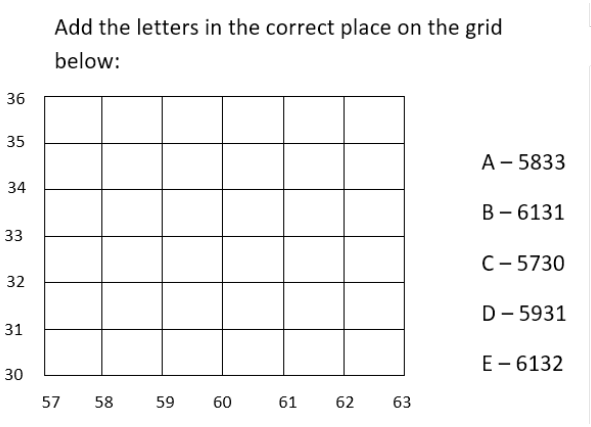
| **SESSION 5: Why was the Manchester Ship Canal created?**<br><br>Look at a photograph of the Manchester Ship Canal: do they think this is physical or human? Explain that it is human because humans dug out the land for the canal to flow through.<br><br>Explain how to sketch the path of a river.<br>Children sketch the path of the River Mersey and the Manchester Ship Canal:<br>  <br><br><br>Discuss the pathways: the River Mersey meanders a lot and the Manchester Ship Canal is straight.<br>• Ask the question: why then was the Manchester Ship Canal created if we already had the River Mersey?<br>• Explain that the Canal was built to help with trade because it took a long time for the boats to travel through the meanders and was also tricky to navigate through. | **End points covered in this session:**<br><br>Understand why the Manchester Ship Canal was created.<br><br>**Vocabulary: physical, human, pathway, river, canal, navigate, trade.** |
| **SESSION 6: What effects can rivers have on a location?**<br><br>ENQUIRY QUESTION: How do rivers affect us?<br>Children are given mixed up pros and cons about living near to a river, they sort them into the correct category:<br>• Pros: fresh water supply, fertile land around the river, food supply, picturesque, activities.<br>• Cons: flooding, lose valuables, risk of drowning, crops dying because of flooding, contaminated water, may attract unwanted animals, littering and harm on wildlife, erode the land.<br>CHESTER ZOO LINK: Animals often live near to rivers as they are a great food source and water supply. Herbivores benefit from the diversity of plant life near to a river.<br><br>Look at the effects of flooding from rivers:<br>• What is flooding? Why does it happen? (link to climate change)<br>• Link to flooding in the local area (Sankey Bridges) photographs: | **End points covered in this session:**<br><br>Know the effect that rivers can have on the land around them.<br><br>**Vocabulary: fertile land, flooding, erosion, damage, dam.** |

- What was the cause and extent of the damage and lasting effects of this sort of flooding?
- How could we manage flooding?
- Link to the use of dams (e.g. Hoover Dam, Woolston Weir and the Three Gorges Dam).
- Focus on the Three Gorges Dam: why is it used? What is the advantages and disadvantages of having this Dam? (Link to hydroelectricity)

**SESSION 7: SKILLS LESSON**

Learn how to use four-figure grid references and how they can help us locate something on a map.



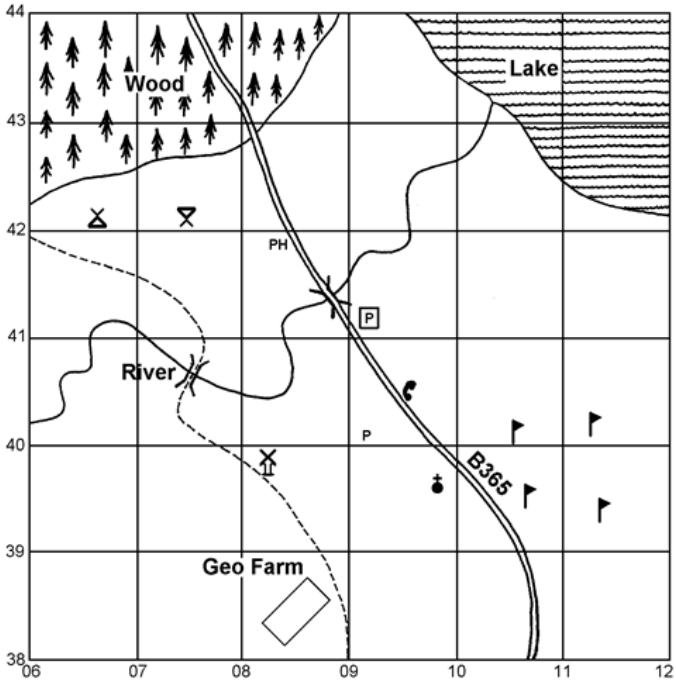

Recap how to use a key and why they are important.

**End points covered in this session:**

Know how to use four-figure grid references.

**Vocabulary: four-figure grid reference.**

## Four- Figure Grid References




**KEY:**

- Wood
- Lake
- Secondary Road
- Bridge
- Camp Site
- Parking
- Picnic Site
- PH Public House
- P Post Office
- Golf Course
- Place of worship with spire
- Public Telephone
- Windmill

1. Give a 4-figure grid reference to locate the lake _____.
2. Give a 4-figure grid reference to locate part of the wood _____.
3. Give a 4-figure grid reference for a bridge _____.
4. Give a 4-figure grid square containing part of the golf course _____.

| 5. Answer; public telephone, windmill, car park, place of worship with spire, post office or public house to the following questions; | | | |
|---|---|---|---|
| (a) The | is in square 0839. | (b) The | is in square 0841. |
| (c) The | is in square 0939. | (d) The | is in square 0941. |

**Future learning this content supports:**

The content of this unit will support learning on physical and human geography in other locations around the world.