Year 6 Geography: Rivers and the Water Cycle — Autumn Term

Is it possible to create more water?

Geographical Skills:

- Suggest relevant questions and make decisions based on knowledge, understanding and facts.
- Use precise geographical words, e.g. erosion, deposition, urban and rural, and describe processes.
- Use atlases to find places using the index.
- Draw and annotate sketches to describe and explain geographical processes and patterns
- To select from appropriate visual media to record evidence- e.g. photography.
- Use latitude and longitude on atlas maps.
- To use decision making skills e.g. deciding what measures are needed to improve safety in the local street

Fieldwork: Visit from Northumbrian Water

Prior Learning:

My Country, My School; Beside the Seaside; My Locality; Around the World; Comparing North East region to a European region; Rule Britannia; Mountains, Volcanoes and Earthquakes; Sustaining the World's Resources; Marvellous Maps; Comparing a region of the UK with South America.

Curriculum Skill(s)	Learning Intention	Knowledge and Key Vocabulary
Locational Knowledge: • To know the locations and environments of significant places both globally and locally- e.g. Continents, Oceans, longest rivers, deserts etc. • To confidently locate places on a world map. • Develop knowledge of the locations and environments of significant places- *e.g. Continents, Oceans, longest rivers, deserts etc.*	Where are the most significant rivers in the world? • Recap prior learning – locate England and other countries of the UK, continents and oceans on a world map/atlas/globe. Locate Whickham, Newcastle and London on a UK map. Locate capital cities of the UK on a UK map • locate the key rivers of the UK and the world • use atlases to find places using the index • compare the length of rivers • compare the discharge of rivers	**Knowledge:** • Name and locate countries of the UK and their capital cities • Name and locate seas and oceans that surround the British Isles • Know the difference between the UK and the British Isles • Name and locate the continents and know that we are part of Europe • Name and locate the five major oceans • Know that the UK is in the northern hemisphere and the difference between the northern and southern hemisphere as well as the significance of the equator and the tropics • Locate Whickham, Newcastle, Gateshead and London on a UK map and know the county Whickham is in • Locate the Tyne river and other significant rivers of the UK such as the Thames and the Severn • know the longest river in the world is the Nile in Africa (4130 miles) and be able to locate it on a map and know the country and continent it is on • Locate the Amazon river and know the country and continent it is on

		• know the smaller rivers and streams are called tributaries **Vocabulary:** England; Scotland; Ireland; Wales; Northern Ireland; UK; British Isles; London; Dublin; Belfast; Cardiff; Edinburgh; North Sea; Atlantic Ocean; English Channel; Irish sea; continent; Europe; Asia; Africa; North America; South America; Australasia/Oceania; Antarctica; Pacific ocean; Indian Ocean; Arctic Ocean, Southern Ocean; Northern hemisphere; Southern hemisphere; equator; Tropic of cancer; Tropic of Capricorn; Whickham; Newcastle; Gateshead, region; county; tributary; discharge.
Place Knowledge: • To recognise how places fit within a wider geographical context and are interdependent. • To use atlases to find out about other features of places, e.g. *mountain regions and weather patterns*.	Where are the sources and mouths of some of the key rivers of the United Kingdom? • identify the key features of a river system.	**Knowledge:** • know where a river joins the sea is called its mouth • know where a river begins is called the source • identify the sea a river in UK flows into (Identify the North Sea, Irish Sea, English Channel and Atlantic Ocean) • know that not all rivers flow into the sea, some join other rivers **Vocabulary:** source, mouth
Human and Physical Geography: • To identify the different views that people, including themselves, hold about topical geographical issues- e.g. *building projects, deforestation.* • To explain why places are like they are- e.g. *in terms of weather conditions, local resources and historical development.* • To recognise how people can improve the environment or damage it, and how decisions about place and environment affect the future quality of people's life. • To identify how and why places change, e.g. *through the closure of shops, buildings of new houses, conservation projects)* and how they change in the future (*e.g. through an increase in traffic, or influx of tourists.*	What is the water cycle and how does it work? • explain the water cycle • look at the impacts of drought and floods and the causes of these • look into the impact of wasting water and how we can conserve our water consumption What are the key features of a river and how are they formed? • describe the key features of a river system • recognise some physical processes of river erosion and how it causes changes in places and environment How do the processes of erosion and deposition form meanders and oxbow lakes?	**Knowledge:** • know the water cycle is a continuous cycle; it has been happening since the start of time, and will continue • explain that it is a closed cycle; there is no more or less water now than at the start • know the water they drink from the tap could have been all around the world • know why some areas of the UK and the world have floods and droughts • know that wasting water can cause damage to the environment • know that in some parts of the world, clean drinking water is not readily available and that some parts of the world have poor sewerage and sanitation systems

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- Recognise how and why people may seek to manage environments sustainability, and to identify opportunities for their own development.
- To have awareness of current global issues and the effect on the populations- e.g. *factory closures in Redcar, hurricane in Haiti, tsunami in Japan etc*.
- To recognise some physical and human processes (e.g. *river erosion, a factory closure*) and how they cause changes in places and environments.

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- explain why places are like they are- e.g. in terms of weather conditions, local resources and historical development
- identify how and why places change and how they may change in the future

How do humans use rivers and why are they so important?

- describe the ways rivers are used
- list some advantages and disadvantages for different uses of a river.
- identify possible future impacts of river use

What is the impact of damming rivers?

- explain the impact of damming rivers

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- know that a river is divided into Upper, Middle and Lower Course
- know how the river flows at each part
- know that rivers do not travel in straight lines
- rivers cause erosion and deposit debris

Vocabulary:

Water cycle, evaporation, precipitation, transpiration, run-off, condensation, precipitation, closed cycle, flood, drought, flood plain, climate change, water consumption and conservation, sewerage, sanitation, flood defences

Upper course, middle course, lower course, valley, channel, waterfall, rapids, gorge, meander, tributary, confluence, flood plain, levee, delta, estuary

Erosion, transportation, deposition, meander, oxbow lake, waterfall, overhang, load

Leisure, industry, trade, transport, conservation, pollution

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Geographical Enquiry:

- Using: maps, counts, photographs, graphs, measurements, films and reports
- Carrying out fieldwork
- Researching secondary sources
- Engaging with people, communities, views and opinions
- Tackling issues and relevant events
- Proposing outcomes and taking actions
- Working at different scales of enquiry e.g. local, regional, global but in connected ways

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What is the impact of damming rivers?

- identify the different views that people, including themselves, hold about topical geographical issues
- recognise how people can improve the environment or damage it, and how decisions about place and environment affect the future quality of people's life.

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Knowledge:

- can give two reasons why dams are built
- Can give advantages and disadvantages to building dams

Vocabulary:

Dam, reservoir, hydroelectric power, renewable energy, displacement of communities, ecosystems, flooding

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<td colspan="3">Thinking Deeper: Children could go on to role play a debate about one particular example of river usage.</td>
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- Subject Specific links – Maths: reading co-ordinates, looking at lengths and capacities of rivers; Science: Water cycle, rocks and erosion, global warming and climate change; History: Knowing that rivers such as the Tyne, Thames and Nile were important for trade and settlement in the past

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• Personal Development – developing opinions about the use of damns; being mindful of own water consumption; developing empathy for those in different parts of the world where clean drinking water is not easily accessible; developing empathy for victims of floods and drought
• SMSC – reflecting upon the ethics of creating damns; how wasting water can have a negative impact on the environment; how floods and drought affect communities and ecosystems
• Cultural Capital – to extend heir knowledge of where rivers are situated in the UK and the importance of rivers and ports for trade
• Careers – water sport leisure industry, Northumbria water rolls, water treatment industry, conservationist
• British Values – democracy and debating - knowing in England we are a democratic society; appreciating that we have clean drinking water readily available from a tap
• Equality – to respect that people have different view points regarding ethics of damns