



May we give them roots to grow and wings to fly.



Our Curriculum – Medium-Term Planning

Term and Year:	Summer 1
Class:	Year 4/5
Subject:	Geography
Key Unit Question:	Investigating Rivers: How do we use water?
Key Themes:	Environment
Memorable Experience:	OASES – River Studies (Hamsterley Forest)

Vocabulary that will be taught:

Aquifer: An underground layer of rock or soil that holds water

Cloud: collection of tiny water droplets or ice crystals suspended in the air

Condensation: water vapour in the atmosphere becoming liquid, forming clouds

Estuary: the tidal mouth of a river, where the tide meets the stream

Evaporation: the process of turning from liquid into vapour

Mouth: where a river flows into a larger body of water

Precipitation: rain, snow, sleet or hail that falls to or condenses on the ground

River: a large natural stream of water flowing in a channel to the sea, a lake or another river

Sea: the expanse of salt water that covers most of the earth's surface

Source: where a river starts

National Curriculum Objectives:

- Describe and understand key aspects of physical geography, including climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.

Rationale:

Rivers have always been extremely important for people. This unit allows children to consider the importance of rivers in settlements, travel and farming. This will be helpful when considering settlements in History. This unit has been chosen for the Autumn Term of Year 4/5 so that it matches with the Y4 Science objective to 'identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature'. What all lessons in the module have in common is a desire to make geography exciting and stimulating and based on real places. In addition, the emphasis throughout is ensuring that, as teachers, we use the correct vocabulary when explaining processes geographically, reinforce locational and place knowledge and, likewise, expect our pupils to do the same.

Prior Knowledge:

Children have learned in KS1 that rivers are physical features, and they will be able to identify them on a map. In lower KS2, children studied our region and will be able to recall the names and locations of our local rivers.

What do we intend pupils to know and be able to do at the end of this unit?

Substantive knowledge:

- I know the process of the water cycle
- I know a river flows from its source into another body of water
- I know the different uses of water around the world

Disciplinary knowledge:

- I can collect and record evidence
- I can analyse evidence and draw conclusions
- I can compare maps with aerial photographs
- I can draw a sketch map using symbols and a key



Key lesson questions		Activities/Key points
Lesson 1	What is the water cycle? - I can label the water cycle - I can explain where water comes from - I can use the correct vocabulary when referring to the water cycle	- Introduce the lesson's key vocabulary and ask students to match each word to an image. - Can students work out what the hidden image is? Why is Earth nicknamed the 'Blue Planet'? Explain that 71% of Earth's surface is covered in water. - Where do we find water? Ask students to write down their ideas with a partner. Feedback ideas. - Watch the BBC water cycle video. Can students work out the missing labels on the diagram? - Students label a diagram of the water cycle. - Challenge the students to do the Scholastic water cycle quiz. Make it competitive by putting them in quiz teams.
Lesson 2	What are the features of a river system? - I can name the features of a river system - I can match names to photos, maps and satellite photos - I can answer questions about the features of a river system	- Recap the key processes of the water cycle taught in the last lesson. How do streams and rivers form? Watch the first 30 seconds of the BBC Bitesize video. - Explain to the students that rivers begin as springs/streams in upland areas. This is called the river <i>source</i>. They eventually flow into the sea at the <i>river mouth</i>. - As rivers flow across the landscape, they create many landforms. Can the students identify the <i>waterfall</i> and the <i>lake</i>? - Ask students to match the names of river features to the photos, maps and satellite photos Then label river features on a map. - Challenge students to answer the questions about the rest of the BBC Bitesize video.
Lesson 3	What are the three stages of a river? - I can name the three stages of a river - I can talk about the different characteristics of each stage - I can describe the characteristics of a river	- Ask students to match the lesson's key vocabulary to the dictionary definitions. Then ask them to match each word to a photo. - In the last lesson we learned that rivers create many landforms. Can the students remember any names of river features? Show them the examples of waterfalls, valleys and gorges. All of these are created by a process called <i>erosion</i>. If there is time, watch the Billy Blue Hair video about erosion. - Now explain that a river's journey can be split into three different stages – upper course, middle course and lower course. Each of these stages has different <i>characteristics</i>. Explain the meaning of characteristics if necessary (e.g. What are the characteristics of a good learner/footballer?). - With rivers, the characteristics which vary are: - altitude - channel width - water speed - amount of erosion - Now look at the examples of rivers at different stages. Ask the students to discuss the characteristics for each stage. - Students put the description labels in the correct column for upper, middle and lower course.
Lesson 4	Where is the River Wear? - I can locate the River Wear on a map - I can compare maps with aerial photographs - I can label human and physical features on the River Wear	- Ask students if they have heard of the River Wear. What do they know about it? Show them the map. Can they find the source and the mouth? - Show the photo of Wearhead and then look at a map/satellite photo of the area. Can they locate Wearhead on the map? What other river features can they identify? - Introduce students to the activity. Ask them to stick their first map/satellite photo in and then show them the example labels and paragraph. - Remove these and ask students to write their own. - Repeat this process for the other locations along the Wear: - Encourage students to concentrate primarily on river features (e.g., meanders, tributaries, locks). If they have time, they can also write about notable human features (e.g., Auckland Castle, Durham Cathedral).



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Lesson 5	Why is water important? • I can explore the different ways water is used by humans • I can sort the types of water use into categories • I can consider water use around the world and compare it to water use in the UK	• Ask students to write down all the ways they use water with a partner. Discuss which of these are necessary for survival (needs) versus luxury uses (wants). Can the students explain the reasoning for their views? • Explain that water is used by humans in a vast number of ways. Can they think of any commercial/industrial, recreational, agricultural and community uses? • Remind the students that we also share water supplies with the Earth's wildlife. Can they identify any of the species? • Students sort the images of types of water use into different categories: - Household - Commercial/industrial - Recreational - Agricultural - Community - Wildlife • Students classify each type of water use as necessary (needs) or a luxury (a want). They then explain their reasoning. • Remind students that we are fortunate as many people around the world lack access to clean tap water. Watch and discuss 'Water – The World Water Crisis' video.
Lesson 6	How do we use water? End of Unit Assessment / Knowledge Harvest	