Year 9
Subject: Geography
Topic/Unit: Water on the land
When: HT3

Huntington School
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Overview: This unit teaches the key geomorphological processes which are the natural mechanisms that shape and change the Earth's surface. These processes explain how moving water carves out valleys, transports material, and builds new landforms. This is a foundational topic that connects physical earth processes with human survival as it considers the causes and impacts of flooding events with a focus on York, alongside exploring the options that we have for managing these events.

Why this? Why now? Students learn in geography that physical processes and human processes work together not only to shape the landscape but influence the way that we live. In York we are at the confluence of two rivers systems, both of which have an impact on the lives of the inhabitants of York. This unit teaches the students key geomorphological processes related to their city.

Building on...building to: The key processes of erosion, transportation and depositions were introduced in Year 7 in the coasts topic. Students learn to apply the same processes to a different context. This feeds into physical geography at GCSE which takes the knowledge and understanding further in the UK physical landscapes unit where students learn that distinctive fluvial landforms result from different physical processes. It is also the building blocks for studying water and carbon at A Level.

Sequence summary:

- The global hydrological cycle and local drainage basin as concepts
- How does a river change from source to mouth?
- What features are found along the upper, middle and lower course of a river valley and how are they formed?
- What are the human and natural causes of flooding in York?
- What are the social, economic and environmental effects of flooding in York?
- How can we manage river flooding in York using hard and soft engineering?

Key Vocabulary:

- Drainage basin – An area of land drained by a river and its tributaries
- Tributary – A smaller river which feeds into a larger river
- Hard engineering - a flood management strategy that involves building artificial, man-made structures to control, redirect, or alter the natural flow of a river
- Soft engineering - a flood management strategy that works *with* natural river processes and the environment, rather than trying to control them with artificial concrete structures.

Assessments: Regular recall and retrieval tasks on whiteboards throughout each lesson to check understanding and dispel misconceptions. End of unit knowledge-based test.

Able and interested: Go and look at the Foss Barrier and Clifton Ings – two methods of managing rivers flooding in York. Visit York - Find river, sea, groundwater and rainfall levels - GOV.UK to track how York's rivers are responding to rainfall events.

Inclusion, Personal Development and Wider Skills: Tasks are scaffolded to build confidence. Students learn to understand how landforms are created in sequence. Sketch mapping skills are learned. Students learn to make decisions based on information they are presented with.

Homework and Independent Learning: Homework is set fortnightly. Tasks may include pre-reading, offering reasoning for an argument or researching information to prepare for a lesson.