



River Landscapes: Processes

Lesson Plan and Teachers Notes

This GCSE / Key Stage 4 River Landscapes package is designed to support all major examination boards, including OCR, Edexcel, and AQA. However, some content included may not apply to every specification. **Teachers must ensure they follow the requirements of their own exam board's specification when delivering lessons.**

The lessons can be worked through at any pace, and can be split into multiple lessons if needed. This flexibility allows you to adjust the flow based on the class's understanding and time constraints. If some sections require more in-depth exploration, feel free to extend them over additional lessons to ensure students fully grasp the concepts before moving on.

The worksheets can be used in-class or as homework, depending on the pace of the lesson.

Lesson Objectives:

- Define a river
- Explain the different components of a river
- Understand and explain the different fluvial (river) processes

Assumed Prior Knowledge:

At GCSE level, students should have already encountered many river landscape concepts. This lesson will build upon the existing knowledge about fluvial processes (erosion, weathering, mass movement, transportation and deposition) which students may have previously covered at an earlier stage.

Resources:

- Worksheets
- YouTube videos

Notes for each slide:

Teachers should decide what information students record into their workbooks.

Slide 1:

- Read through the learning objectives so students are aware of what they will be learning through this lesson.

Slide 2:

- Define what a river is. The definition can be copied into workbooks if required.

Slide 3:

- River component terms are listed down the left-hand side and definitions are listed on the right. Ask students to complete **exercise 1** and correctly match the term to the definition. These terms should not be new to students at this level, however a refresher may be required.



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Slide 4:

- Students should mark their worksheets. If there are any terms incorrectly labelled, ensure students have corrected them in their workbooks.

Slide 5:

- Once students understand the definitions of each term, ask them to complete **exercise 2** and correctly label each component on the diagram. The answers will appear in sequence.

Slide 6:

- This slide introduces the river (fluvial) processes which will be covered in the slides ahead: erosion, weathering, mass movement, transportation and deposition.

Slide 7:

- This slide defines erosion and shows some images which show this process in action.

Slide 8:

- There are four types of erosion which are explained on this slide. Students should copy the definitions into their workbooks.

Slide 9:

- Play the YouTube video (<https://www.youtube.com/watch?v=hAaHwU3vhIE&t=1s>) which demonstrates how these types of erosion occur.

Slides 10:

- This slide defines weathering and shows some images which show this process in action.

Slide 11:

- There are three types of weathering which are explained on this slide. Students should copy these definitions into their workbooks.

Slide 12:

- Play the YouTube video (<https://www.youtube.com/watch?v=8Ly7dIBDfCw>) which demonstrates how these types of weathering occur. Note: the first 1 minute and 30 seconds covers erosion and changes in the upper, middle and lower course. Whilst this is relevant information, you can skip ahead to 1:30 to learn about weathering.

Slide 13:

- This slide defines mass movement and shows some images which show this process in action.

Slide 14:

- There are five types of mass movement which are explained on this slide. Students should copy these definitions into their workbooks.



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Slide 15:

- Play the YouTube video (<https://www.youtube.com/watch?v=w-w-pAtRRTU>) which demonstrates how mass movement occurs. Note: this video also covers erosion and weathering. This video can be played as a recap of the above, or you can skip ahead to 5:00. The video collates landslides and mudslides into one term (sliding), however we have split this due to the difference in makeup and consistency of each process.

Slide 16:

- This slide defines transportation and shows some images which show this process in action.

Slide 17:

- There are four types of transportation which are explained on this slide. Students should copy these definitions into their workbooks.

Slide 18:

- Play the YouTube video (<https://www.youtube.com/watch?v=8EIoBao-UvI>) which demonstrates how the different types of transportation occur.

Slide 19:

- This slide defines deposition and shows some images which show this process in action. Students should copy these definitions into their workbooks.

Slide 20:

- Play the YouTube video (<https://www.youtube.com/watch?v=Z-LkHGs7btc>) which demonstrates how deposition occurs.

Slide 21:

- Play this video to the class which shows a river flowing around a meander. The video shows the water flowing faster on the outside of the bend and slower on the inside of the bend.

Slide 22:

- A still shot of the video on the previous slide is shown here. Ask students if they can identify which processes the arrows are pointing to. The answers will appear in sequence.

Slide 23:

- These practice questions can be completed in class time or as homework, depending on the class ability. If required, a discussion can be held about each question to generate some guidance. Higher level students may be able to answer question 4 using knowledge they have gained in earlier years, however for students struggling to answer this question, it can be moved to complete after the next lesson.