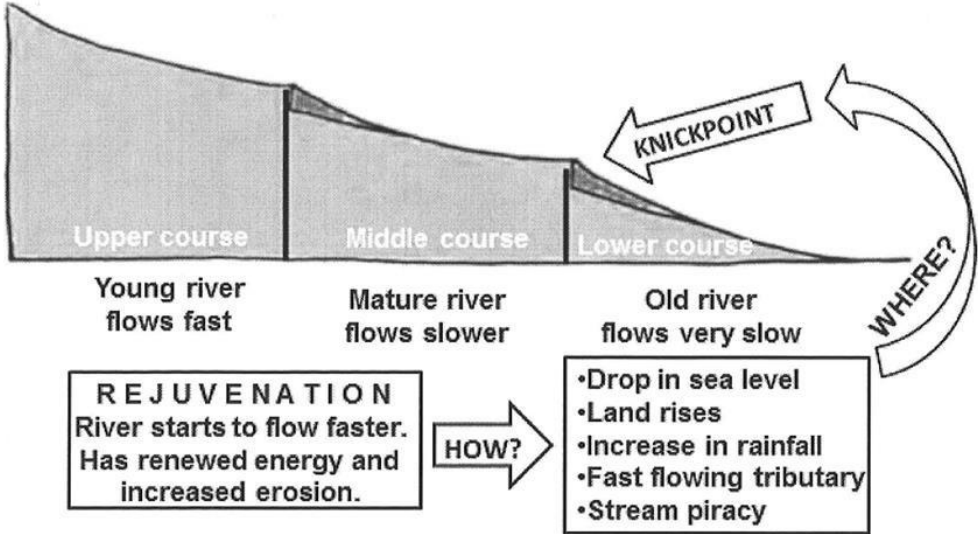
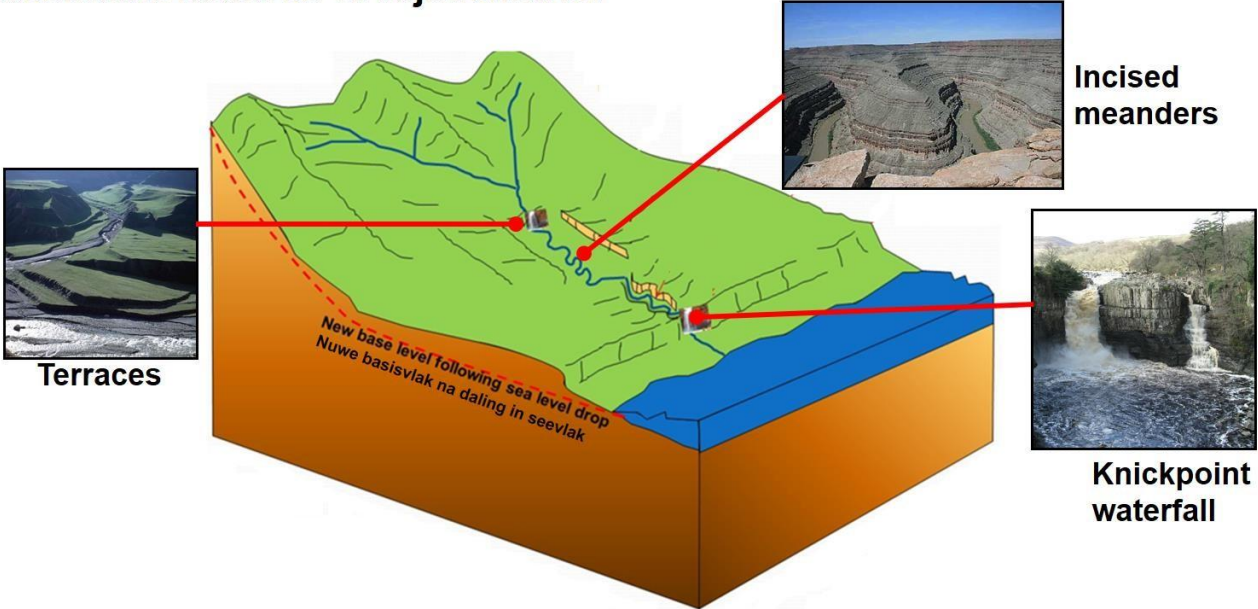


What topics will be covered in this lesson?	The following topics will be covered in this lesson: 1. Rejuvenation 2. Superimposed and Antecedent drainage patterns 3. River capture (stream piracy) 4. Catchment and river management		
1. REJUVENATION <i>What is it? Where is it? Why is it there? What does it look like?</i>			
Define river rejuvenation	 Teaching moment <i>You must be able to define Rejuvenation</i>	The old people in the cartoon are enjoying themselves in a children's playpark. They are showing characteristics of a younger stage in life. They will feel rejuvenated, meaning feeling and looking younger or having new energy. Rivers can also rejuvenate <i>River rejuvenation takes place when there is an increase in the speed and erosive power of a river. It has more energy to erode downwards, causing a new valley in the old one.</i>	 Older people showing characteristics of a younger stage in their life

What is river rejuvenation? Explain the reasons for rejuvenation. (how)	See diagram.	
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Name the resultant features of rejuvenation 	• Terraces • Incised meanders • Knick point • Valley in a valley	Resultant features of rejuvenation 
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2. SUPERIMPOSED AND ANTECEDENT DRAINAGE PATTERNS

What is it? Where is it? What does it look like?

What is a superimposed drainage pattern?

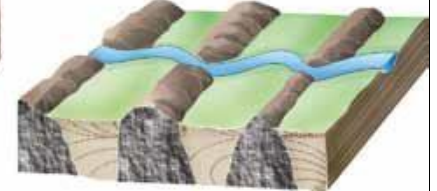
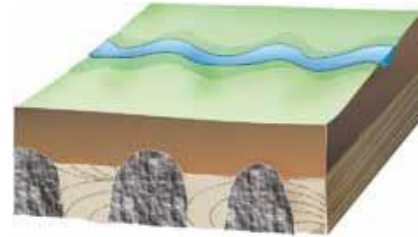
What is an antecedent drainage pattern?



Make sure that you know in which pattern the landscape or the river is older.

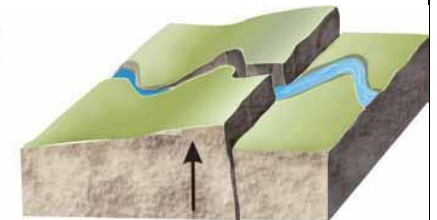
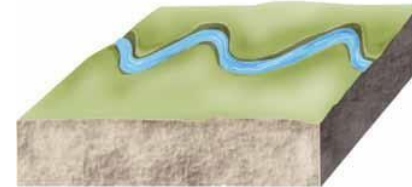
Superimposed drainage patterns

- The landscape is older than the river
- Stream inherited its course from overlying layer
- Rivers do not avoid resistant rock
- Rivers erode through mountains creating gaps



Antecedent drainage patterns

- The river is older than the landscape
- River maintains its original course



3. RIVER CAPTURE (STREAM PIRACY)

What is it? Where is it? Why is it there? What does it look like? What is the impact? How can it be managed?

What is river capture (stream piracy)?

When a river intercepts the water of another river

Think of river capture as a crime being committed. Water is being stolen! When investigating a robbery the following questions are usually asked:

How does river capture occur?

River capture occurs when a river cuts through a watershed by means of headward erosion (backwards) and intercepts the water of another river.

Identify and describe each of the features of river capture

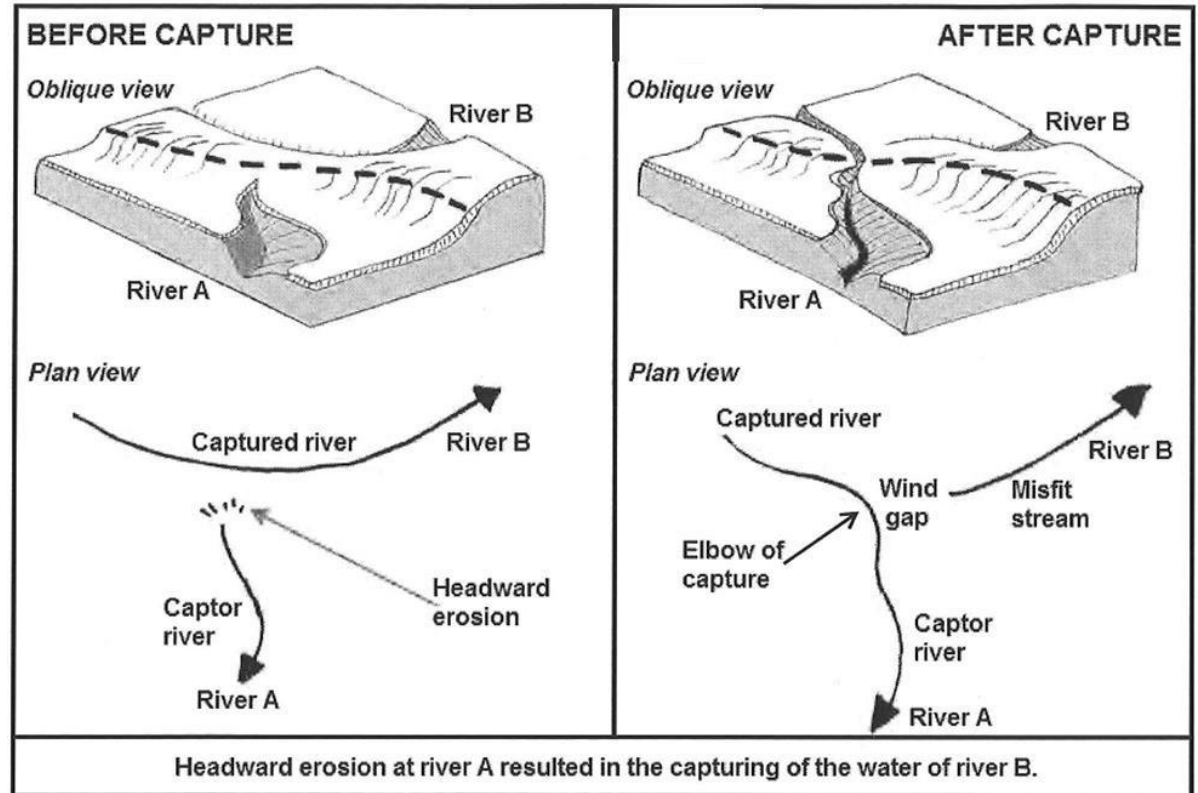
- Captor river
- Captured river
- Misfit stream
- Elbow of capture
- Wind gap



See diagram



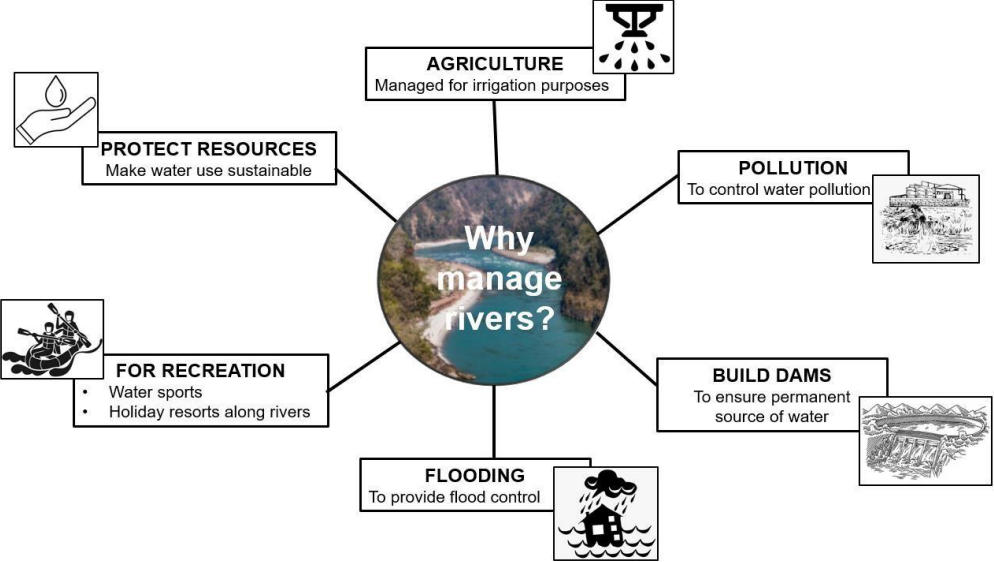
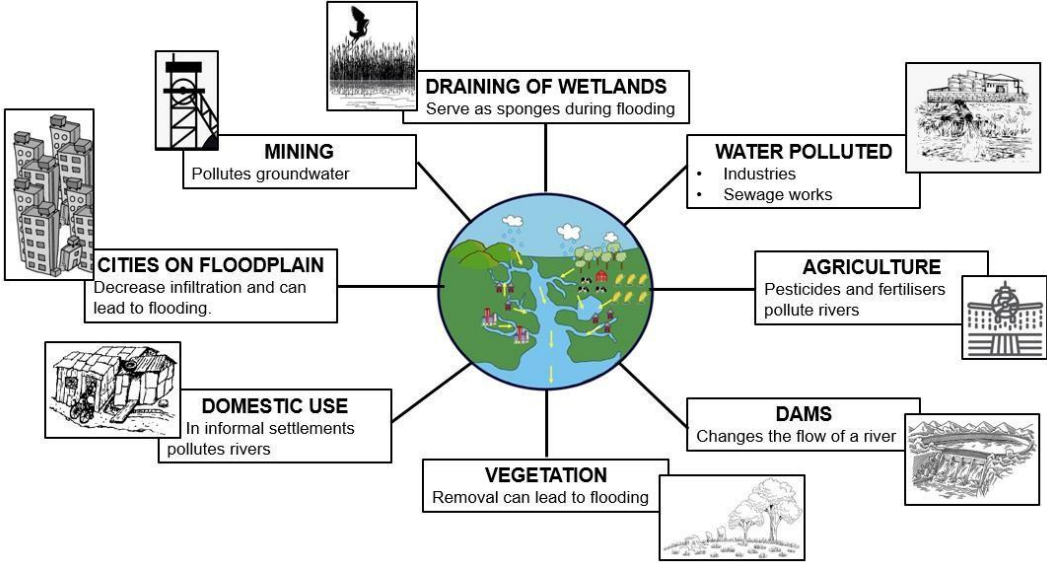
- Who is the robber?
- Who was robbed?
- Where did the robbery happen?
- What happened during the robbery?
- Is there any evidence?



FEATURE	EXPLANATION
Captor river	The energetic stream that intercepts (takes) the water of the other river.
Captured river	The river which water was intercepted (taken) by the captor river.
Misfit stream	The river that has lost its water. (Also called beheaded stream)
Elbow of capture	The place where stream piracy has taken place
Wind gap	The dry river valley between the elbow of capture and the misfit stream
Waterfall	May form at the point where the captured river flows into the captor river

4. CATCHMENT AND RIVER MANAGEMENT

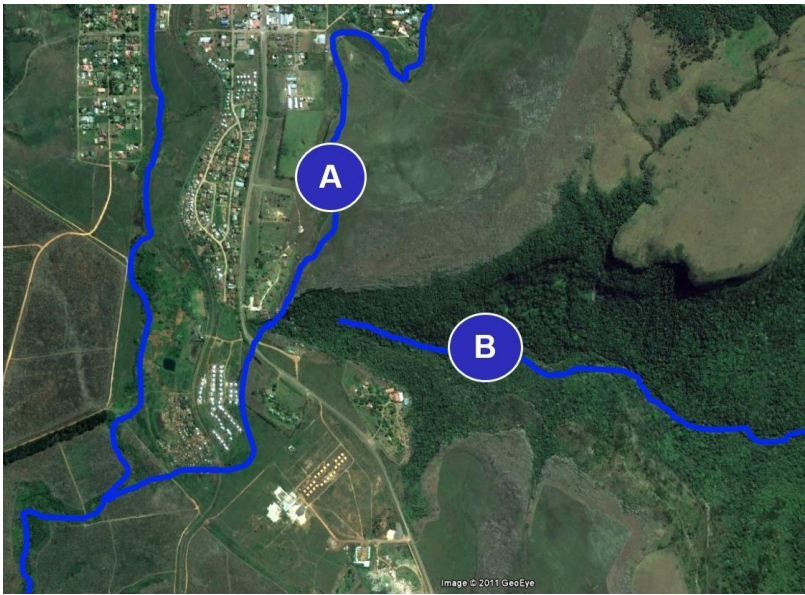
What is it? What is the impact? How can it be managed?

Why is it important to manage drainage basins and catchment areas?	See mind map	Importance of managing drainage basins and catchment areas 
What is the impact of people on drainage basins and catchment areas?	 There are of course more impacts. You must be able to identify the impacts of people on diagrams or in case studies	Impact of people on drainage basins and Catchment areas 

LEARNER TASK 1

The photographs below show before and after river capture (stream piracy).

Before river capture



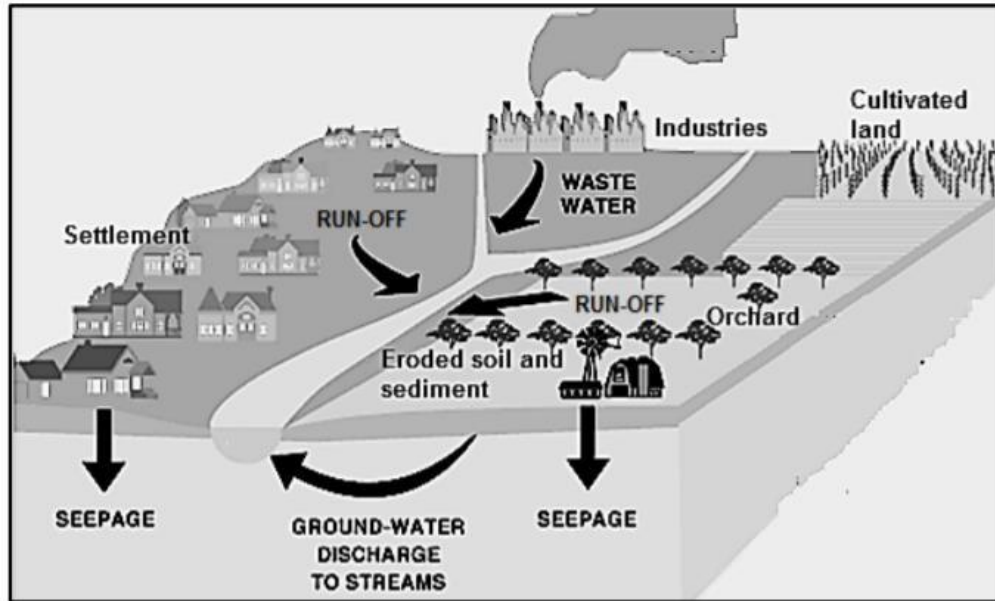
After river capture



- | | | |
|---|-------|-----|
| 1. Define river capture (stream piracy) | (1x2) | (2) |
| 2. Make use of A and B and explain how river capture occurred in the area | (2x2) | (4) |
| 3. Write the correct features in the white blocks after river capture occurred. | (5x1) | (5) |
| 4. In a paragraph of approximately EIGHT lines, discuss the impact of river capture on the area in the photographs. | (4x2) | (8) |

LEARNER TASK 2

The diagram below shows catchment and river management.



1. What is the main source of waste water? (1x1) (1)
2. Discuss how the removal of the natural vegetation for human activities (2x2) (4) increased the eroded soil and sediments in the river.
3. Explain how run-off from both settlements and cultivated land decreases (2x2) (4) the quality of water of a river.
4. In a paragraph of approximately EIGHT lines, discuss why sustainable river management is important. (4x2) (8)



This concludes the section of Geomorphology. Scan the QR code or follow the link to view the full telematics lesson regarding Geomorphology



<https://www.youtube.com/watch?v=kOMMjwtaBbk&list=PLFm4vZVcwuDbNQX5V2gxB2SVqoeg7oIHn&index=2>

CONCEPTS/TERMS



- You must know the definitions of the following concepts/terms
- Definitions of terms appear in in exam questions.
- These terms are used when setting questions. You must know them in order to understand the questions
- These terms should form part of your Geography subject language

WORD BOARD

Rejuvenation

Knick point

Terraces

Incised meander

Valley in a valley

Super imposed drainage pattern

Antecedent drainage pattern

River capture

Captor river

Captured river

Misfit stream

Elbow of capture

Wind gap

Headward erosion

