

# River Processes

Is this upper, middle or lower course?



# The Upper Course

- In the upper course the stream flows over \_\_\_\_\_ ground. The main processes is \_\_\_\_\_ . It flows around obstacles making \_\_\_\_\_. Weathering processes wear back the valley sides as the stream \_\_\_\_\_ vertically, so a \_\_\_\_\_ valley is formed. Erosion is the main process being carried out on the stream

**v-shaped, steep, vertical, interlocking spurs,  
erosion, erodes**



# Annotate your sketch



- Draw a field sketch of the following landscape
- On your field sketch annotate the following:
  - interlocking spurs
  - steep slopes
  - stream
  - poor-quality grass
  - v-shaped valley

# What do you think?

- What do you think causes the upper course of the river to look different to those in the lower course?





# How do they get there?



# Main Processes

- A river valley is subjected to three main landscaping processes
  - **erosion**
  - **transportation**
  - **deposition**
- What do you think each of these processes means?

# Erosion

- You are going to be given some information about the four different types of erosion
- You must then completed the four sections of the illustrated dictionary for these key terms
- Your diagrams must support your written explanations
- Diagrams must be clear and neat
- Explanations of each process must be included



# What do you know?

- Using your knowledge of erosion answers the following in full sentences

1. Near the source the river will erode more laterally (sideways) or vertically (downwards)?

2. Will the river always erode the river bed at the same rate, or could certain weather events change this?

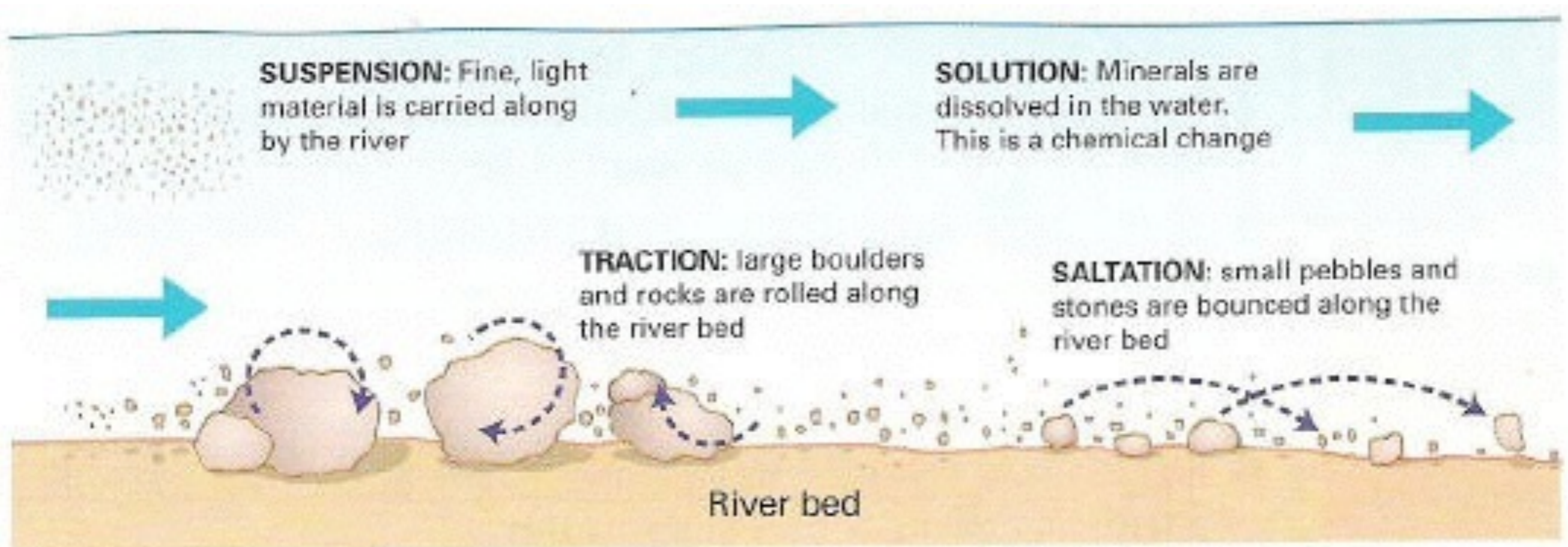
3. What type of erosion becomes more important as the river moves towards the mouth?

# What next?

- What do you think happens to material once it is eroded?

# Transportation

- Transportation is the where the river moves the eroded load down the river
- This can occur in four ways





# What happens next?

- The river has now eroded some material and transported it downstream
- What happens next?

# Deposition

- Deposition is when the river dumps the material it has been carrying

1. Why does a river deposit material?

2. When in the rivers course do you think it will deposit the most material and why?

# Exam Practice

- Complete the exam questions on your own



4.a)

(i) The material which it is carrying. 1 mark.

(ii) X=Suspension Y=Saltation. 2 @ 1 mark

(iii) Ideas such as:

- more load will be carried
- heavier material will be moved / large boulders may be moved
- greater amount of traction will occur
- materials usually moved by traction may be moved by saltation
- more material in suspension, etc.

3 @ 1 mark

# What have we learnt?

- What can you remember?
- With a partner ask each other to give the correct term for different types of erosion or transportation from a definition
- First to get three correct is the winner

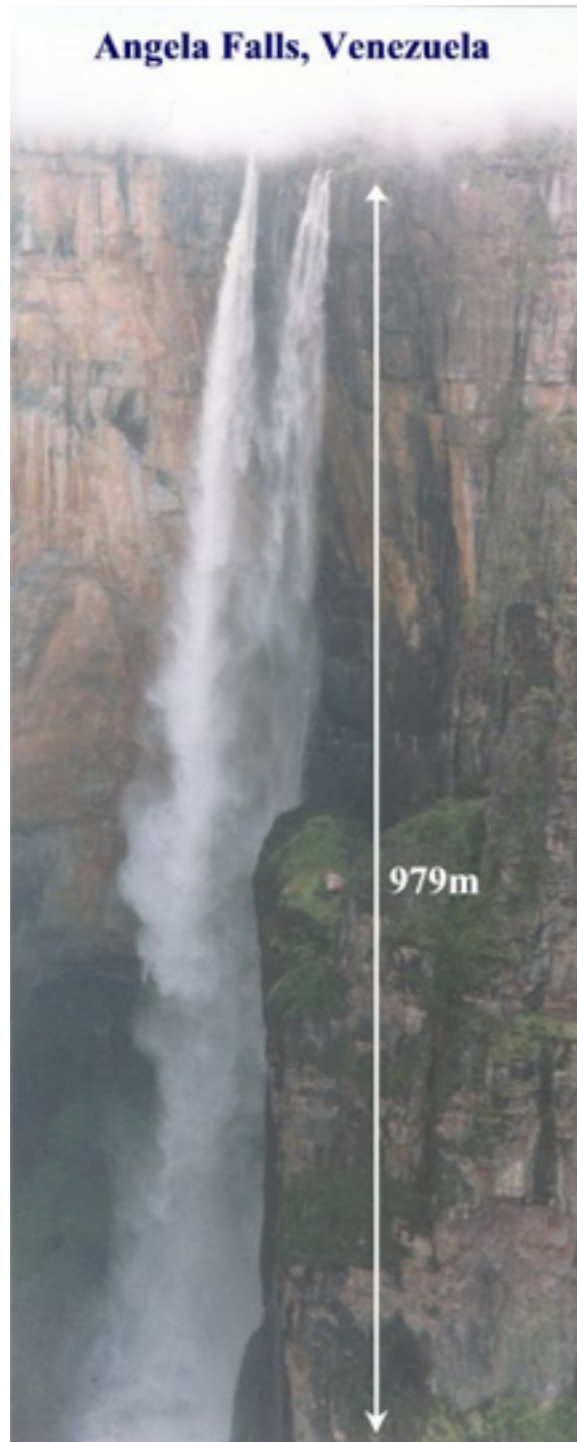
# River Landforms



# Name this landform



# Where do we find waterfalls?



- Waterfalls are found in the **upper course** of a river where the majority of erosion is **vertical erosion**

How do waterfalls form?

# Waterfall Formation

- Include clear and neat diagrams complete with a clear written explanation using geography terms



What do you think happens to a waterfall over time?





