

## River Answers Homework 1

1) Which part of the river is labelled A. (1)

b) Source - the source is the start of the river, where it is at its highest point.

2) Describe the cross profile at points labelled B and C in figure 1 (4)

2 Cross profile at point B: The valley is V-shaped with steep sides [1 mark]. The channel is narrow and shallow [1 mark].  
Cross profile at point C: The valley is very wide and almost flat [1 mark]. The channel is very wide and deep [1 mark].

4) Give two features that show that figure 2 is the upper course of a river (2)

2.1 Any two from: the gradient of the river channel is steep [1 mark]. / The valley has steep sides [1 mark]. / The valley is V-shaped [1 mark]. / The river channel is narrow [1 mark]. / The river valley has interlocking spurs [1 mark].

5) Explain why the upper course of a river valley has a different cross profile from the lower course (4)

3 This question is level marked. How to grade your answer:  
Level 0: There is no relevant information. [0 marks]  
Level 1: There is a basic description of vertical and lateral erosion and their effect on the cross profile. [1-2 marks]  
Level 2: There is a clear explanation of the different types of erosion and their effects on the cross profile. [3-4 marks]  
Here are some points your answer may include:

- In the upper course of the river, vertical erosion is dominant.
- Vertical erosion deepens the river valley (and channel), making it V-shaped.
- High turbulence in the upper course causes the rough, angular particles to be scraped along the river bed, causing intense downwards erosion.
- In the lower course of a river, lateral erosion is dominant.
- Lateral erosion widens the river valley (and channel) during the formation of meanders.