## River System Source Tributary Confluence River Levee Oxbow Lake Channel Mouth

Watch the video embedded on ibgeographypods and take basic notes from the sections on velocity, slope and discharge.			
Factor	How it affects the flow / discharge of the river		
Gradient			
Discharge			
Channel Shape			

Waugh – Integrated Approach P.68. Define the two types of flow within a river				
Laminar Flow				
Turbulent Flow				

Waugh – Integrated Approach P.68. Draw a sketch to show the features of both laminar and					
turbulent flow.					
Laminar Flow	Turbulent Flow				

Waugh – Integrated Approach P.68. What is the relationship between velocity and turbulence and how does this impact on the transportation of the rivers load?



## The velocity of a river is influenced by three main factors

<ol> <li>Channel Shape &amp; Cross Section (Waugh – Integrated Approach P.69)</li> </ol>				
Draw it!				
Explain it!				
2. Roughness of the channel's bed and banks (Waugh – Integrated Approach P.70)				
Draw it!				
Draw it!  Explain it!				
Draw it!				
Draw it!				
Draw it!				
Draw it!				
Draw it!				
Draw it!				
Draw it!				

3. Channel Slope (Waugh – Integrate	d Approach P.70)	
Draw it!		
Explain it!		
The lev	ng profile of a river	
The for	ig profile of a river	
Upper reaches	Middle reaches	Lower reaches
Discharge is relatively small and the channel is inefficient owing to a large	Discharge is higher owing to tributaries adding water. The	Discharge is highest and the channel is very efficient in shape.
channel surface area compared with	channel is more efficient. A	A low gradient is capable of
the amount of water. A steep gradient is needed to maintain energy levels.	moderate gradient is needed to maintain velocity.	maintaining or increasing velocity.
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## River is at the same level as the graded River is above its graded long profile River is higher than its profile. Lateral erosion and transport due to a hard rock outcrop. Height above base level graded profile. Vertical will dominate. This section does not Waterfalls and rapids show active erosion will dominate. gain or lose sediment overall. vertical erosion. Sediment is transported through. River is below its graded profile. Lateral erosion and deposition of sediment will dominate. Base level solidans sea level

The long profile of a river runs from its \_\_\_\_\_\_ to the point where it enters the sea, a lake or joins another and larger river. The character of the long profile changes d\_\_\_\_\_. Overall it has a smooth concave shape. It is steep and in places irregular where the river is flowing well above \_\_\_\_\_ level in upland country. The irregularities occur where \_\_\_\_ rock outcrops run across the valley. Natural \_\_\_\_ and reservoirs can also disrupt the smoothness of the long profile. However, the profile becomes much gentler and smoother as the river runs through \_\_\_\_ land country and reaches its destination. Changes in the character of river landforms are associated with these changes in the long profile.

Distance downstream from river source