



## Deposition Data – Teacher Notes

### A river and its sediments



As rivers carry sediments down from the mountains to the sea overall grain size deposited on the stream bottom decreases. This is due to friction decreasing the carrying power of the river. The heaviest material is dropped out first. **On the Swan River, boulders are found at Toodyay, coarse sand at Midland and fine sandy silt at the river mouth.**

Hydrologists took specimens from five locations five kilometres apart along a riverbed. So they could calculate the proportions of coarse, medium and fine materials on the riverbed.

<b>Coarse</b>	<b>sand</b>	<b>500µm-1000µm</b>	<b>gritty to touch, almost all grit</b>
<b>Medium</b>	<b>medium sand</b>	<b>250µm-500µm</b>	<b>little bits of grit in fine sand</b>
<b>Fine</b>	<b>mud/silt</b>	<b>≤250µ</b>	<b>mostly mud</b>

Can you work out the sequence in which the specimens were taken? . **Specimen size varies so students have to adjust to be equivalent. Fractions or percentages can be used.**

Draw a graph comparing their findings at the highest and lowest point of the river valley their findings at the highest and lowest point of the river valley. **A bar graph is required because results are not continuous.**

Location	Specimen size	Coarse	Medium	Fine	From Mountain
Bob's Bridge	10kg	4kg (40%)	4.5Kg (45%)	1.5kg (15%)	first
Lazy bend	30kg	6kg (20%)	9kg (30%)	15kg (50%)	fourth
The crossing	10kg	3 kg (30%)	3kg (30%)	4kg (40%)	third
The lump	20Kg	7kg (35%)	7kg (35%)	6kg (30%)	second
Mann Road	5 kg	1kg (20%)	1kg (20%)	3kg (80%)	fifth

**Graph must have a title, have both axes labelled and be in pencil.**