



HANDS-ON EXPERIMENTS

RIVER ESTUARIES

Estuaries form when the Rivers meet the Sea. The sediment from the rivers is carried downstream until eventually deposits are made at the mouth of the river where the estuary lies.

In many cases, particular formations develop, like Delta regions. These are visible channels for the water to flow down, carved out by the flowing water itself.



The Experiment

What you'll need: Two Sponges, Liquid Glue, Large Plastic (or metal) Painting Tray, Glasses or Flasks, Pepper (Course and Fine), Cocoa, Water, Food colouring

1

Cut your sponge into the design shown and glue them onto the painting tray, side by side on the shallow section, leaving some room at the top for water to be poured.

2

While the glue sets, fill a glass with water, small amount of food colouring and add the pepper and cocoa on to the top;

3

Pour the water swiftly in to the of the tray, ensuring the run off is either being collected at the bottom or you are outside;

4

Watch how the sediment is being collected but some of the finer sediment runs through to the bottom to be collected in the river/lake;

5

Remove the middle section of the sponge to reveal where all the sediment was filtered.

Further Investigation

- Try experimenting with different types of sediment;
- Attempt to pour the water in to the estuary at faster and slower rates. Does it make difference to the amount of sediment that gets through?
- If you pour the water in at different points, does it change where the sediment is collected?
- How about if you take the middle section of the sponge out?

VIDEOS FOR THIS RESOURCE AT:

INTRODUCTION:



Clickable Link:

<https://youtu.be/fXWDyw8LSqY>

CONCLUSION:



Clickable Link:

<https://youtu.be/Shbz7emCr6s>

