Geography at key stages 1 and 2 (Year 6)
Unit 14: Investigating rivers

Vocabulary

In this unit, children are likely to use:

> water cycle, rainfall, source, spring, river, stream, hill, slope, steep, mountain, waterfall, valley, channel, lake, mouth, erosion, pollution, landscape

They may also use:

> tributary, reservoir, drain, weir, floodplain, meander, gorge, rapids, estuary, delta, weathering, transportation, deposition

Geography at key stage 3 (Year 8)
Unit 7: Rivers - a fieldwork approach

Prior learning

It is helpful if pupils have:

- some familiarity with the components of the water cycle, can match the terms with definitions and produce a flow diagram
- considered the difference between weathering and erosion
- learnt about weathering and understand erosion, transportation and deposition in the context of river studies
- discussed various changes in rivers and river valleys from source to mouth, after research in textbooks
- some understanding of, and can use, the terms river basin, source, mouth, meander, tributary, watershed, waterfall

Geography at key stage 3 (Year 8)
Unit 7: Rivers - a fieldwork approach

Language for learning

Through the activities in this unit pupils will be able to understand, use and spell correctly words relating to:

- rivers, eg river basin, source, mouth, meander, tributary, watershed, water cycle, waterfall, valley, gorge, channel, current, landscape, reservoir, weir, flood plain, rapids, estuary, delta, profile, hydrology, storage, infiltration;
- the effect of water on the environment, eg weathering, erosion, transportation, deposition;
- fieldwork, eg clinometer, flow meter, sample

RIVER TERMINOLOGY

Precipitation: rain, snow, sleet, dew formed by condensation of water vapour in the atmosphere - the depositing of these on the earth's surface.

Source: the area where the headwaters of a river rise - spring that forms the starting point of a stream.

Headwaters: the tributary streams of a river in the area in which it rises.

Tributary: a stream or river that feeds another larger one.

Confluence: a flowing together of rivers.

Mainstream: the main current of a river.

Waterfall: a cascade of falling water - where there is a step in the river bed.

Plunge-pool: pool, often deep, below a waterfall.

Meander: curves or bends of a river.

Long profile: cross section of a river from beginning to end, in a river from source to mouth

Flood-plain: a flat area bordering a river prone to flooding and composed of sediment deposited during flooding.

Combe or Coombe: a deep hollow or a short, steep-sided valley.

Ford: a shallow area in a river that can be crossed by cars, horse-riders and animals. Usually where the river is slower moving and the banks are not too steep.

Dam: a barrier built across a river (to create a pool or reservoir).

Estuary: a widening channel where a river nears the sea - usually tidal.

Mouth: Where the river meets the sea.

Delta: the flat alluvial area at the mouth of some rivers where the mainstream splits into several distributaries.

Alluvial (Alluvium): the 'wash' of a river - sediment, silt, sand, mud deposited by the river.

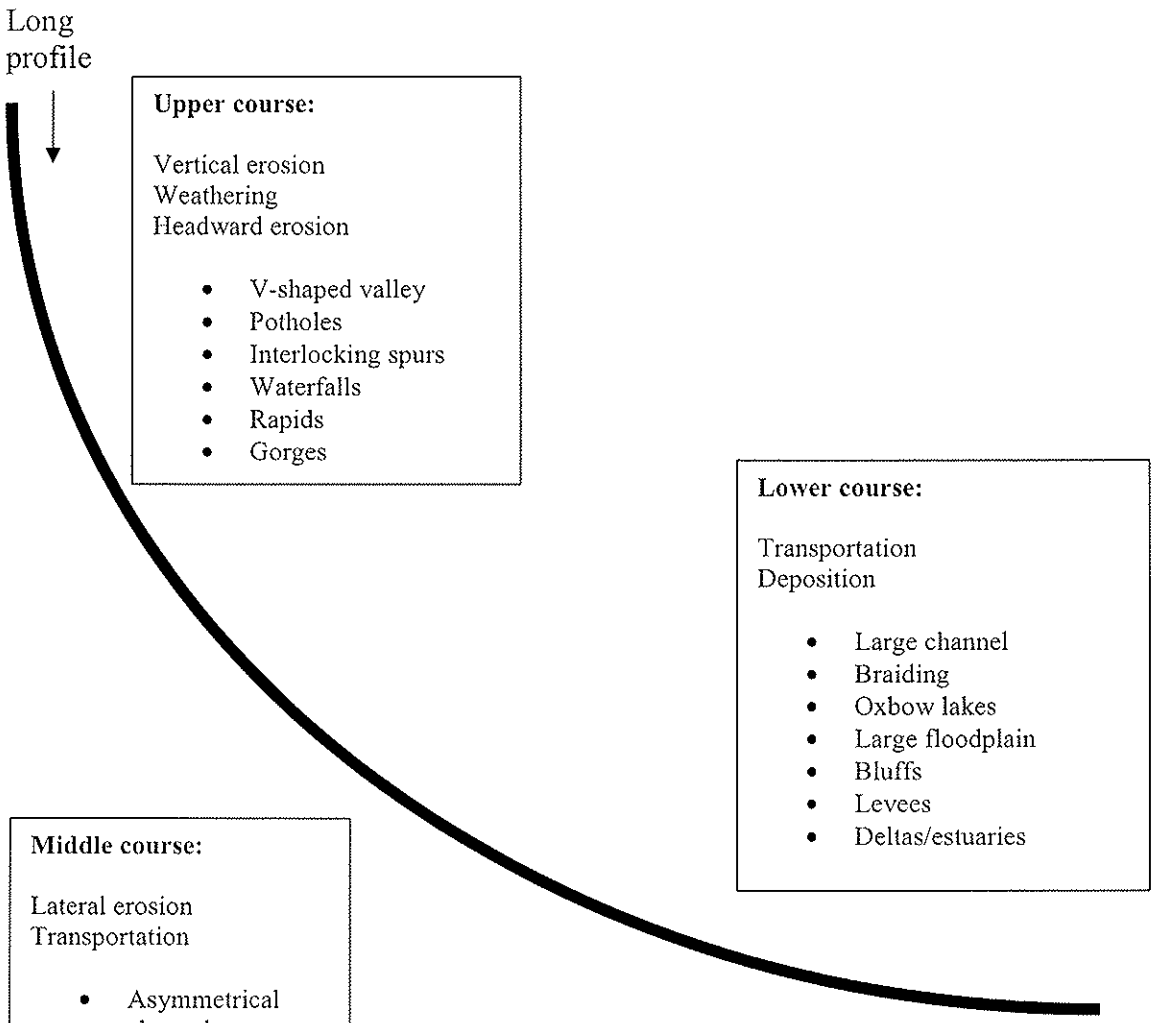
Culvert: a covered channel that crosses under a road or railway.

Erosion: the wearing away of soil / rocks by the action of water (or footsteps!).

Water capacity or volume: 1UK gallon = 4.55 litres (actually 4.5454>)
220 gallons = 1 x cubic metre of water
1 cubic metre of water = 1,000 litres

'Terminology' kindly supplied by Chris Fitzroy

River processes and Landscape Features down Long Profile



MEASURING A RIVER (KS2)

W = width, measured at water surface from one bank to the other: expressed in metres

$\mathbf{d^1 + d^2 + d^3 + d^4 / 4}$ = **average depth**: expressed in metres

V = velocity, calculated by timing a floating object between two points of set distance: expressed in metres per second

Cross sectional area = width x average depth: expressed as square metres ($m^{2)}$

Discharge (volume) = cross sectional area x velocity: expressed as cubic metres per second (m^3/s)