

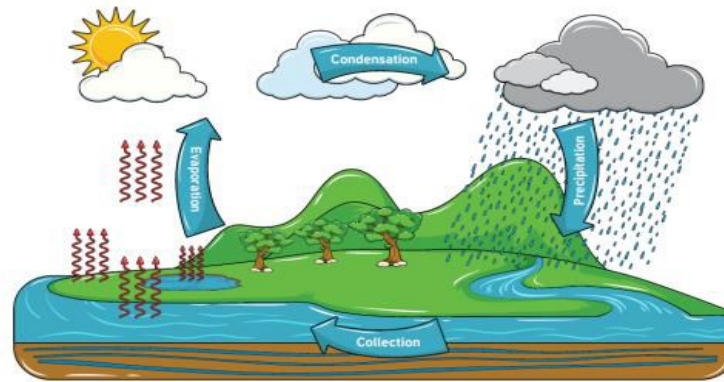
Geography knowledge organiser—Year 6 - Rivers

What I need to know

- Name and locate main rivers within the UK.
- What a river is.
- Physical features of a river are caused by erosion and deposition.
- The water cycle.
- Rivers can flood and flood prevention schemes are needed to protect settlements.
- Know the location of the River Severn and River Chelt.

What should I already know

- The water cycle
- The countries of the United Kingdom
- Physical features, e.g. mountains and rivers of North and South America and Europe.



The Water Cycle

Precipitation—The liquid and solid water particles that fall from clouds and reach the ground.

Evaporation—Liquid water changing to water vapour and rising into the atmosphere.

Condensation—Water vapour changing to liquid and forming clouds.

Transpiration—Evaporation from plants and trees.

Infiltration—Water sinking into the ground.

Run-off—Water not absorbed by soil which travels to rivers and oceans.

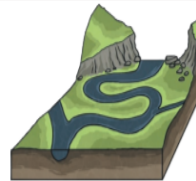
The Course of a River

The Upper Course

Rain falling on high ground collects in **channels** and flows downwards forming a stream. Streams run downhill and join other streams, increasing in size and speed, forming a river. The river here flows quickly and the channel has steep sides and runs through **valleys**. Features include - waterfalls and rapids.

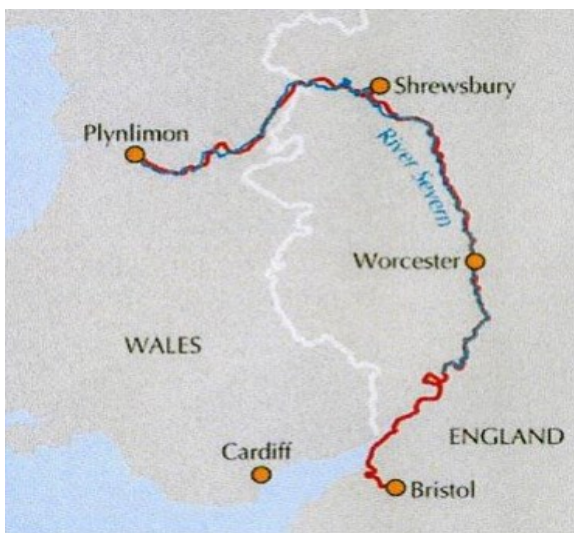
The Middle Course

Fast flowing water causes **erosion** making the river deeper and wider. Features include - meanders.



The Lower Course

Rivers flow with less force due to being on flat land. The river **deposits** the eroded material that it has carried. Riverbanks have shallower sides. Features include - floodplains, deltas and estuaries.



The River Severn

The River Severn's source is in the Cambrian mountains. It flows through Tewkesbury and Gloucester into the Bristol Channel.

Vocabulary

Erosion—to wear away causing the river to change shape

Estuary—the tidal mouth of a river e.g. Severn Estuary

Meander—a bend in the river

Mouth—end point of a river where it flows into the sea

Source—where a river starts

Tributary—a smaller river that joins the main river

Waterfall—caused when bands of soft rock are eroded quicker than hard rock, the river drops in height into a plunge pool.

Confluence—the junction of two rivers.

Floodplain—an area of land adjacent to a stream or river which experiences flooding.

Channel—a landform following the path of a river or stream. Can be natural or man-made.

Basin—the land that water flows across or under on its way to a river.

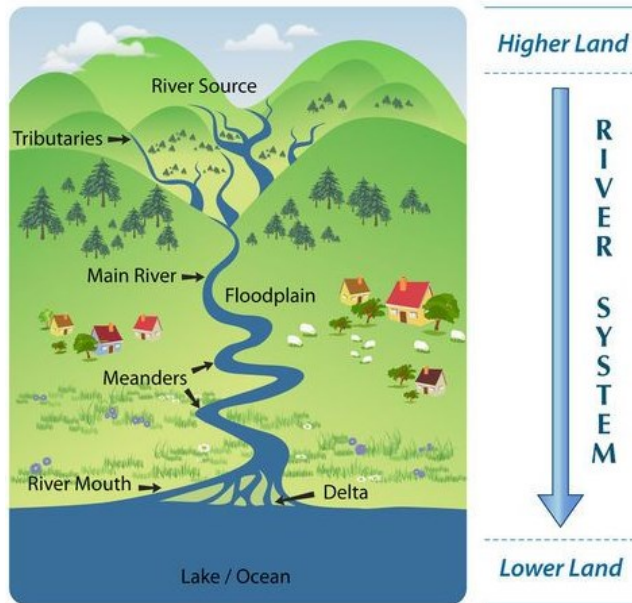
Oxbow lake—when a previous 'bend' or horseshoe shape in a river has carved a new, straight path, allowing the bend to become a lake.

Gorge—a narrow valley with steep, rocky walls located between hills or mountains, with a river or stream running through it.

Permeable—a material which allows water to flow through, e.g. soil.

Impermeable—a material which does not allow water to flow through, e.g. concrete.

Features of a river



Rivers of the UK

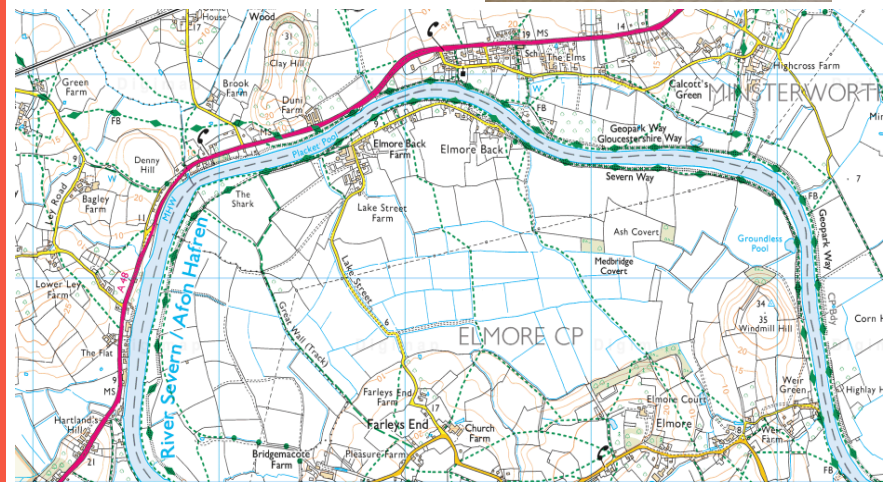
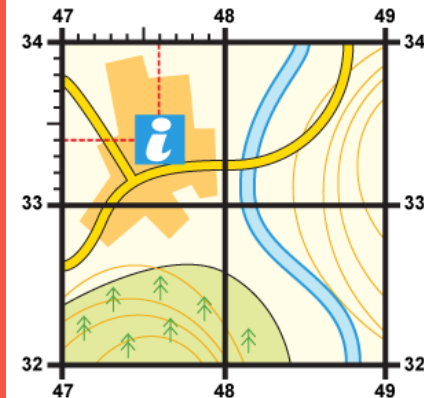


Using Ordnance Survey Maps

Easting—Vertical line on an OS map.

Northing—Horizontal line on an OS map.

1. Find the 4-digit grid reference (do this by giving the Easting line BEFORE and the northing line BELOW) Leave a space after the first two digits.
2. Estimate or measure how many tenths across the grid square your symbol lies. Write this number after the first two digits.
3. Next, estimate how many tenths up your grid square your symbol lies. Write this number after your last two digits.
4. You now have a six-figure grid reference. The tourist information office is at 476334.



Cheltenham Floods (2007)

Heavy rain, overloaded drainage systems and high water levels caused parts of Gloucestershire to flood.



What are the causes of flooding?

A flood occurs when a river bursts its banks and the water spills onto the floodplain. Flooding is usually caused by heavy rain. The faster the rainwater reaches the river channel, the more likely it is to flood.

The following factors may encourage flooding;

- **A steep-sided channel**—a river channel surrounded by steep slopes causes fast surface run-off.
- **A lack of vegetation**—trees or plant catch or 'drink' water. If there is little vegetation, then excess water will be high.
- **A drainage basin**—drains and sewers take water quickly to the river channel. Houses with sloping roofs further increase the amount of surface run-off.