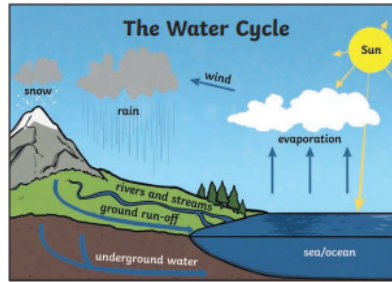


Key Vocabulary	
channel	The course in the ground that a river or water flows through.
dam	A barrier built to hold back water.
deposition/ deposit	When rocks and other materials that have been eroded are dropped off further along the river.
discharge	The amount of water flowing along a river per second.
erosion	Rocks and other river materials are picked up by the water and moved to another place along the river.
mouth	The point where a river joins the sea.
source	The place where a river begins.
tidal bore	A strong tide from the coast that pushes the river against the current causing waves along the river.
tributaries	Rivers that join up with another river.
valley	A long ditch in the earth's surface between ranges of hills or mountains.



Some rivers join up with other rivers (**tributaries**). The point where they meet is called a **confluence**.

The **source** of most rivers is on high ground or in the mountains.



Rivers in England, at their **mouth**, will flow into either the: North Sea, Irish Sea, English **Channel** or Atlantic Ocean.

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.

Meander - a curve in the river



Eroded materials are carried by the river and released, building up the land on the inside of the bend where the water flows more slowly.

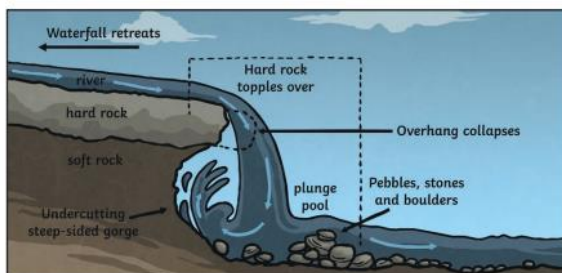
Oxbow lakes - a U-shaped lake



As meanders grow, two meanders can merge together through **erosion**. The water takes this newer, shorter course. The river **deposits** eroded materials which block off the old part of the river forming an oxbow lake.

How Do We Use Rivers?

Leisure e.g. fishing	+	Controlled population of fish
	-	May leave litter and pollute the water
Industry e.g. factories	+	Sections of rivers maintained
	-	Chemicals pollute the water and habitats
Tourism e.g. walking routes	+	Conservation and education about local wildlife
	-	Too many people near wildlife habitats



Dams

Dams are built to hold water back, usually in a reservoir.

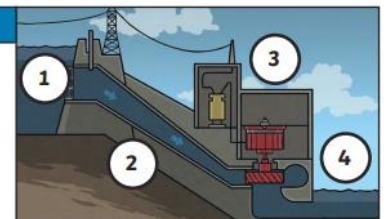
Dams might be built to:

- control the flow of a river to prevent flooding.
- generate power



Hydroelectric Power

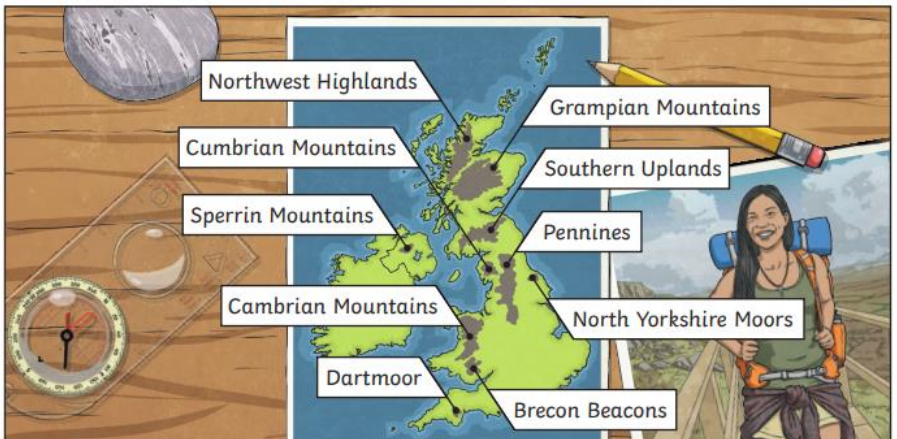
1. Water is held behind a **dam**.
2. When needed, some of the water is released and flows through a pipe (penstock).
3. The falling water turns a water wheel (turbine) which is linked to a generator which produces electricity.
4. The water continues into the river on the other side of the **dam**.



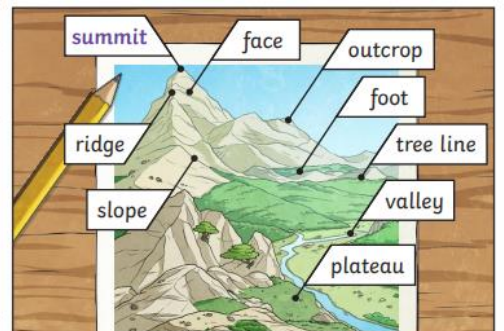
Key Vocabulary	
altitude	The height above sea level.
avalanche	A large amount of snow that quickly moves down a mountain or slope.
crust	The outermost layer of the earth.
gorges	A narrow valley with steep walls, found between hills or mountains.
hypothermia	A serious condition when the body gets too cold and can't warm itself up.
lava	Hot, liquid rock that flows from a volcano.
magma	Hot, liquid rock located deep below the earth's surface.
summit	The highest point of a mountain.
tectonic plate	Pieces of the earth's crust connected together.

Mountains

- Mountains are a natural part of the landscape with steep slopes.
- They rise above 300m.
- They have a **summit** of at least 600m.
- Some mountains are found in groups called a mountain range but some mountains can be on their own.
- Not all mountains are single **summits**.
- Mount Everest is the highest mountain in the world – 8848m.

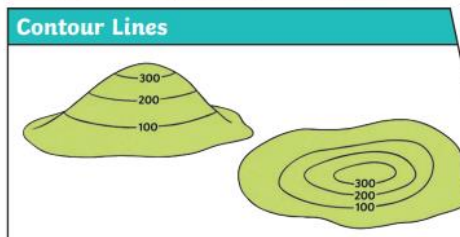


How Are Mountains Made?				
Fold mountains	Fault-block mountains	Volcanic mountains	Dome mountains	Plateau mountains
Tectonic plates collide and rock is pushed up.	Cracks in the earth's surface open up, some chunks of rock are pushed up, some down.	Formed around volcanoes and made of layers of ash and cooled lava .	Formed when magma is forced upwards but doesn't ever flow out of the crust .	Materials taken away through erosion leave deep valleys or gorges next to high cliffs.



Why Do People Visit Mountains?

- The view
- Keeping fit
- The challenge
- Skiing
- Climbing
- Photography



These lines on a map join land that is at the same height.

They are usually marked in 5m or 10m intervals.

The closer the lines are together, the steeper the slope will be.

Risks and Dangers of Mountains

- Low temperature = **hypothermia**
- Bad weather = power cuts/road accidents
- **Avalanches**/landslides
- Altitude sickness
- Wild animals
- Poor access