# Misty Mountain, Winding River

### **Rivers**

A river is a body of water that flows downhill, usually to the sea. Rivers start in mountains or upland areas and flow downstream, collecting water from small, narrow streams, springs, rainfall or other water sources on the way to the sea.

# **River features**

A variety of physical features can be found along the course of a river.

delta	A triangular piece of land at the mouth of a river that has formed because of a build up of sediment.
floodplain	An area of flat land next to a river that floods when the river bursts its banks.
interlocking spurs	Ridges that are formed when a river meanders around areas of harder rock.
meander	A bend in a river or stream.
V-shaped valley	A deep, straight channel that has been cut into the rock by erosion.
waterfall	A cascade of water that falls from a higher level to a lower level.

# **River stages**

### The upper course

The upper course of a river is narrow. Water flows quickly over the riverbed, carrying rocks that erode the land and create steep-sided, V-shaped valleys.



#### The middle course

The middle course of a river grows wider and deeper as the land becomes flatter. Bends called meanders form.



#### The lower course

The lower course is the widest part of a river. The land is flat, and the water flows into the sea at the river's mouth.



# **Changing landscapes**

Rivers, seas and oceans transform a landscape through erosion, deposition and transportation.

#### **Erosion**

Erosion is the wearing away and removal of rock and soil by means of wind or water.

### **Transportation**

Transportation is when rocks and soil that have been dislodged and worn away by erosion are transported in flowing water.

### Deposition

Deposition happens when flowing water slows down. Eroded rock and soil that have been transported are left behind.

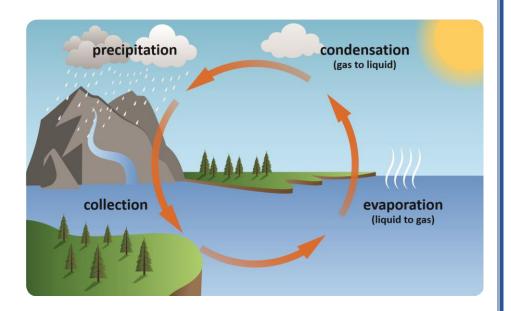
### **Uses of rivers**

Settlements have been built next to rivers for thousands of years because rivers provided essential water, food and power for people in the past. Today, rivers provide habitats for wildlife, hydroelectric power and water for crops. Rivers are also used for leisure activities, such as

canoeing and fishing, and for transporting goods and for transporting goods and people.

# Water cycle

The water cycle is the journey water takes as it travels from rivers, lakes, seas and oceans into the sky and then back down to the ground. Water changes state as it goes around the cycle in four stages: evaporation, condensation, precipitation and collection.





## **Mountains**

A mountain is a large, raised part of the Earth's surface. A mountain's highest point is called its peak or summit.



Himalayas mountain range

# **Types of Mountain**

Mountains can be classified according to what they look like and how they were formed.

Fold mountains form when tectonic plates collide with each other. One plate is pushed down while the other is pushed up and compressed, forming folds.



Volcanic mountains are formed when lava, ash and gases erupt and then cool. These types of mountain often This type of mountain often have steep slopes and are symmetrical slopes.



Fault-block mountains form at plate boundaries. The earth on one side of the boundary is forced up, and the other side collapses.



of when magma is pushed upwards against the Earth's crust. Instead of erupting through the crust, the magma cools and hardens.



Plateau mountains are formed when land is lifted by magma below the Earth's crust. Large, flat areas of land are forced upwards, creating a plateau.



### **Contour Lines**

Contour lines are used on maps to show the topography of the land. They join places of equal height and are usually labelled in intervals of 10m. If contour lines on a map are close together, the land is steep. If they are far apart, the land is flat.



# **Glossary**

altitude	The height of an object or point above sea level.
altitudinal zone	One layer out of many that naturally occur in mountainous regions to form a particular habitat.

### collection

The process of water gathering in oceans, rivers, lakes and streams after falling as precipitation.

#### condensation

The process of a gas or vapour cooling down and changing state into a liquid.

#### contaminate

The process of making something poisonous or less pure.

#### dredge

The clearing of the bed of an area of water by removing mud, weeds and rubbish.

### evaporation

The process of a liquid heating up and changing state into a gas or vapour.

**plate boundary** The place where two tectonic plates meet.

#### ridge

Long, narrow sections of rocky ground that connect mountains.

#### sediment

Very small pieces of sand, soil and stone that form through the process of erosion.

#### topography

The physical appearance of an area of land, especially relating to its shape and surface.

