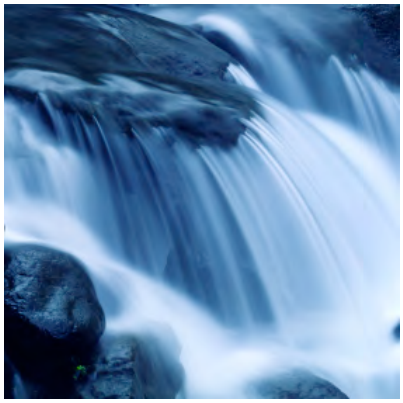

When the river wears away at rock and soils through processes like abrasion, attrition and hydraulic action.

Transport

Erosion

Deposition

When a river carries the sediment it has worn away either in suspension or solution.

When a river slows down and loses its power and drops off the rocks, pebbles and mud it is carrying.

Abrasion

(stones crashing and scraping against another rock surface)

When a river or the sea throws and/or drags other rock fragments and stones against a surface and wears them down through friction.

Attrition

(stones rubbing together)

When a river or the sea wears stones and rock fragments down as they rub against eachother. Over time they get smaller and smaller.

Hydraulic action

(pressure created in cracks)

When water gets into cracks and crevices and forces rock apart because of the pressure that builds up.

Chemical weathering

when chemical forces break down rock such as oxidation, carbonation, hydration and ion exchange.

Mechanical weathering

when physical forces break down or reduce rock into fragments (rocks and stones) - freeze-thaw action and rocks broken apart by plant roots.

Freeze-thaw action

water becomes trapped in a crack or crevice, freezes and expands. On melting it contracts and reduces pressure. This expansion and pressure causes the rock to break down over time.

Tectonic uplift

tectonic plates crashing together cause the earth's crust to bent and folded so that it lifts the crust upwards. This creates plateaux and mountains.

Tectonic rifting

as tectonic plates move apart they create a gap in the earth's crust that opens up as a valley. Often these valleys become the basins for lakes or they channel water into rivers and create canyons.