

Glossary

Unit 3.1

Agents of erosion: water, wind and ice. All three of these agents transport sediments away from the site of weathering

Atmosphere: layer of gases above the Earth's surface

Deposition: the process where sediments drop out of a moving stream of water, air or ice

Erosion: the removal of sediments away from the place of their formation or deposition

Humus: decaying plants and animals and their wastes

Igneous rock: rock formed by the cooling of molten rock, for example basalt

Minerals: substances found in rocks

Non-renewable resource: a resource that takes longer than the average human lifespan to be replaced

Photosynthesis: the process by which plants use carbon dioxide, water and sunlight to make food

Renewable resource: a resource that is always being replaced naturally

Resource: something that satisfies a particular purpose or need

Sediment: material such as silt and sand that is transported and deposited by water, ice and wind and forms layers on the Earth's surface. In time it can become compacted to form sedimentary rock

Sedimentary rock: rock formed by compacting and sticking together of sediments, for example sandstone

Weathering: the process of breaking rocks down into smaller pieces



Erosion



Igneous rock



Renewable resource

Unit 3.2

Biogas: a gas produced from the fermentation of organic waste, such as waste from sugarcane, and used as fuel

Biomass: all plant and animal matter found on Earth

Fossil fuels: fuels such as coal, oil and natural gas, formed from the remains of living things buried millions of years ago

Geothermal energy: energy sources from heat below the Earth's crust

Hydroelectricity: the process of using water falling from a height to turn turbines and generate electricity

Non-renewable energy source: a source of energy that cannot be replaced after it is used, such as oil or coal

Nuclear fuel: using uranium or plutonium

Oscillating wave column: a chamber containing a turbine that is fixed in the ocean. As water flows into and out of the chamber, air pushes the turbine back and forth. This rotation is used to generate electricity

Renewable energy source: a source of energy that can be replaced after it is used, such as solar or wind energy

Solar cell: a device that absorbs solar energy and converts it directly into electrical energy

Tidal barrage: a construction in which water fills a basin as a tide comes in, rotating a turbine as it flows. The water is stored until low tide, when it is released and again turns the turbine. This rotation is used to generate electricity

Wind energy: harnessing energy from the movement of air using wind turbines



Non-renewable energy source



Renewable energy source



Solar cell

Unit 3.3

Aquifer: a layer of pervious rock from which water can be extracted using a bore or well

Finite: non-renewable or has limited availability, i.e. will run out

Groundwater: water that exists underground

Humidity: the amount of water vapour in the air

Impervious rock: rock that does not allow water to soak into it

Percolation: the process of water soaking into the soil

Pervious rock: rock that allows water to soak into it

Precipitation: any water falling from the sky

Run-off: rainwater not absorbed by the soil

Saturated: not able to hold any more water vapour

States: solid, liquid and gas (another state called plasma exists at temperatures over 60 000°C)

Transpiration: the evaporation of water from plants

Water cycle: the natural process of recycling water



Precipitation



Transpiration

Unit 3.4

Flood irrigation: a type of irrigation where water is released in between crops in channels

Irrigation: a practice used in agriculture that provides water to crops using pipes and ditches

Rills: channels in bare soil created by fast-flowing water

Spray irrigation: a type of irrigation where a pump sprays water droplets into the air, which fall onto crops like rain

Springs: places where underground water comes to the surface



Flood irrigation



Rills