

Geology – Knowledge organiser

Week 2 Erosional key words and definitions

Minerals	A natural compound in rock: rock is a mixture of different minerals
Fossil	The shape of a bone, shell, or a plant or animal that has been preserved in rock for a very long period of time.
Sedimentary rock	Formed by compaction and cementation of sediments. Examples include limestone, Chalk, shale and mudstone
Metamorphic rock	Formed when rock is changed through the action of heat and/or pressure, without melting. Examples Slate (from shale)/ Marble (from limestone)
Igneous Rock	Formed by cooling molten magma. Examples Obsidian, Basalt, Granite

Magma	Molten rock below the earth's surface
Lava	Molten rock above the earth's surface
Impermeable	Does not allow water to soak through. Made of interlocking grains
Permeable	Allows water to soak through. Made of round grains with gaps.
Soil	The unconsolidated (loose) mineral or organic material on the immediate surface of the Earth that serves as a natural medium for the growth of land plants.

Week 3

Week 1

You will learn about the three types of rocks, how rocks are weathered and move, and how rock type influences landscapes and the importance of soil

Rocks are made of grains that fit together. Each grain in the rock is made from a mineral, which is a chemical compound. The grains in a rock can be different colours, sizes and shapes.

Week 4

Igneous rocks have randomly arranged interlocking crystals

Sedimentary may contain fossils of animals and plants trapped with the layers of the rocks.

	Extrusive	Intrusive
Where the Magma Cooled	On the surface	Underground
How fast the Magma cooled	Quickly	Slowly
Size of crystals	Small	Large
Examples	Obsidian and Basalt	Granite and Gabbro

Further research:
https://www.youtube.com/watch?v=Vp_S3BDiR-I
<https://www.bbc.co.uk/bitesize/guides/z8jcfrr/revision/1>

Week 5

Weathering

Key processes

The weakening and loosening of rock in-situ by Biological (plants and animals), Chemical (water dissolving calcium carbonate) or Mechanical (freeze-thaw)

Erosion

The breaking up and removal of rock by geological agents (rivers, glaciers, wind and waves).

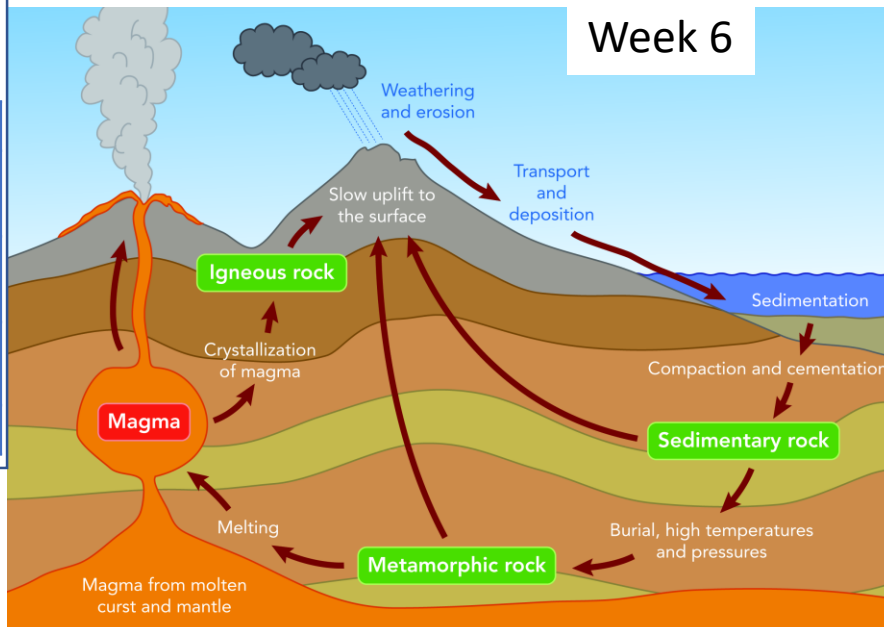
Transport

Rocks and sediment is moved by the action of the geological agents (rivers, glaciers, wind and waves).

Metamorphic rock

Rock and sediment is dropped the Geological agents lose energy rivers, glaciers, wind and waves).

Week 6



Key words and definitions		Week 2
Arab spring	The Arab Spring was a series of pro-democracy uprisings that enveloped several largely Muslim countries, including Tunisia, Morocco, Syria, Libya, Egypt and Bahrain	
Resources	A resource is any physical material constituting part of Earth that people need and value	
Conflict	a serious disagreement or argument, typically a protracted one	
Terrorism	the unlawful use of violence and intimidation, especially against civilians, in the pursuit of political aims.	
Displaced person/refugee	a person who is forced to leave their home country because of war or persecution; a refugee.	



When describing the location you need to include the following

- Continent
- Region
- Country
- Nearby human/physical features
- Compass directions

Week 3

Middle east knowledge organiser

Week 4

Week 1	
Climate zones	Climate zones are areas with distinct climates. These zones might correspond to weather patterns, latitude, or communities of plants and animals.
Mediterranean	a climate distinguished by warm, wet winters under prevailing westerly winds and calm, hot, dry summers, as is characteristic of the Mediterranean region
Semi-arid	means " <i>somewhat dry</i> ". Semi-arid climate is found around the edges of Arid climate
Desert	an area that receives less than 250mm of rainfall per year

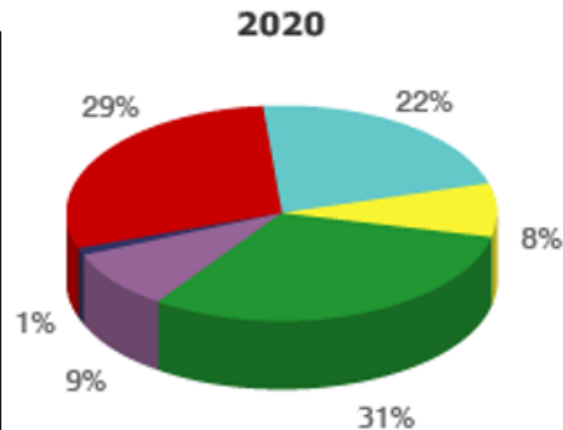
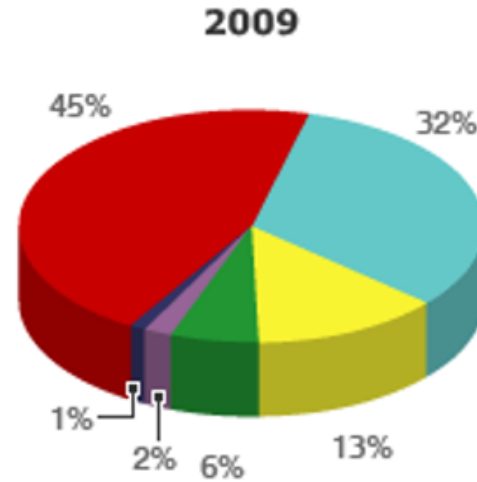
Key words and definitions	
OPEC	is group of 13 oil-exporting countries, founded in 1960. The 13 countries account for 40% of oil production.
Barrel of Oil	1s 160L
UK oil reserves	Measure of the impact of an activity on the environment
Social	The study of people and their environment
Economic	Studies how humans make and create money
Environmental	Interactions between humans and the natural world
Sustainability	Sustainability is the practice of using natural resources responsibly, so they can support both present and future generations
Shia	Make up approximately 20% of the Muslim population across the world
Sunni	Make up approximately 80% of the Muslim population across the world

Key words and definitions	
Natural Resources	Natural resources are materials from the earth that are used to support life and meet peoples need. E.g. Oil, Metals, Stone
Surplus	Having more of a resource than is needed. Supply is greater than demand.
Deficit	Not having enough of a resource. Demand is greater than Supply.
Security	Describes how reliable an access is to a source of a resource E.g. Energy
Sustainable	Meets the needs of the present without compromising the ability of future generations to meet their own needs
Week 1	

Key words and definitions	
Fossil Fuels	Resources made from decomposing plants and animals. Often burned for energy.
Renewable	Cannot be depleted/run out, may have the ability to regenerate
Non-renewable	Can be depleted or run out
Development	The progress of a country in improving itself
Ecotourism	The practice of tourism that has the minimal impact on the natural world
Week 2	

Natural Resources knowledge organiser

UK Electricity Generation



Describe the changes between 2009 and 2020 energy generation

Week 4

The sources of UK energy have changed dramatically over the past 10 years. There has been a 10% reduction in the use of coal. Alongside this a 16% drop in the use of gas. This is an overall fall of 26% for fossil fuels.

The renewable sector has grown by 25% to make up for the reduction in the use of fossil fuels. The reasons for this change is because of increasing costs and limited availability of fossil fuels. Alongside a growing lobby of environmentalism with people being more aware and active in reducing the levels of CO2 released from energy sources.

Week 3



Key words and definitions	
Flow lines	Used to show movement or flows of goods/products. They are proportional
Food Miles	The distance the food has travelled to be on your plate.
Carbon footprint	Measure of the impact of an activity on the environment
Biosphere	All living organisms that can be found in an area/planet
Hydrosphere	All water that can be found in an area/planet
Lithosphere	The solid outer part of the Earth including the brittle upper portion of the mantle and crust
Dense	Something being tightly packed or close together
Sparse	Something being loosely packed or spread apart
Week 5&6	