

Earth Structure

Sedimentary, igneous and metamorphic rocks can be inter converted over millions of years through weathering and erosion, heat and pressure, and melting and cooling.

The three rock layers inside Earth are the crust, the mantle and the core.

Rock cycle: Sequence of processes where rocks change from one type to another.

Weathering: The wearing down of rock by physical, chemical or biological processes.

Erosion: Movement of rock by water, ice or wind (transportation).

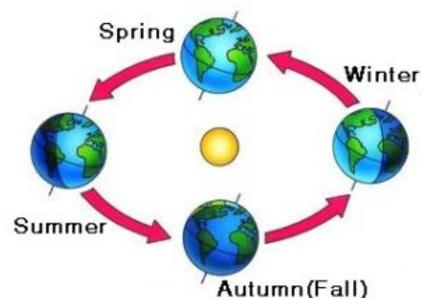
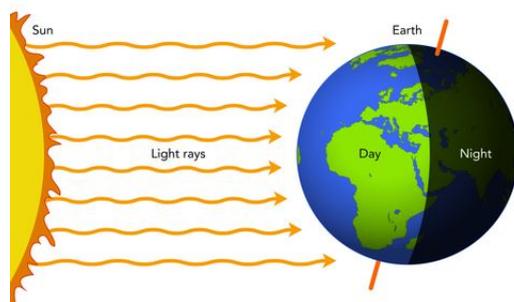
Minerals: Chemicals that rocks are made from.

Sedimentary rocks: Formed from layers of sediment, and which can contain fossils. Examples are limestone, chalk and sandstone.

Igneous rocks: Formed from cooled magma, with minerals arranged in crystals. Examples are granite, basalt and obsidian.

Metamorphic rocks: Formed from existing rocks exposed to heat and pressure over a long time. Examples are marble, slate and schist.

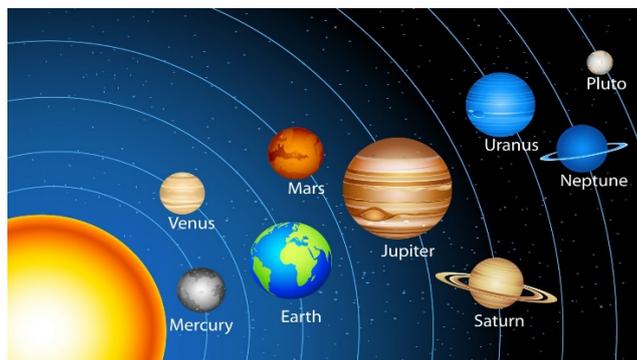
Strata: Layers of sedimentary rock.



Universe

The solar system can be modelled as planets rotating on tilted axes while orbiting the Sun, moons orbiting planets and sunlight spreading out and being reflected.

This explains day and year length, seasons and the visibility of objects from Earth.



Our solar system is a tiny part of a galaxy, one of many billions in the Universe.

Light takes minutes to reach Earth from the Sun, four years from our nearest star and billions of years from other galaxies.

Galaxy: Group of stars held together by gravity. Our galaxy is called the Milky Way.

Light year: The distance light travels in a year (over 9 million, million kilometres).

Stars: Bodies which give out light, and which may have a solar system of planets.

Orbit: Path taken by a satellite, planet or star moving around a larger body. Earth completes one orbit of the Sun every year.

Exoplanet: Planet that orbits a star outside our solar system.

Subject	Year 7 Earth
Name the three rock layers inside the Earth.	Crust, mantle and core.
The Earth's core is split into which two layers?	Inner and outer core.
Name the rock type made from sediments.	Sedimentary rock
High temperature and pressure can turn rocks into what?	Metamorphic rock
Liquid magma cools and solidifies into which rock type?	Igneous rock
Name an igneous rock.	Granite, basalt, obsidian.
Name a sedimentary rock.	Limestone, chalk, sandstone.
Name a metamorphic rock.	Marble, slate, schist
Rocks can be broken down by which three processes?	Physical, chemical, biological.
Keyword: Layers of sedimentary rock.	Strata
The Earth rotates on what?	A tilted axis.
What does the Earth orbit?	The Sun.
Why do we see planets and moons?	Reflected sunlight.
What does the Sun, planets and moons make up?	The Solar System.
What do groups of stars make up?	A Galaxy.
What do all the Galaxies make up?	The Universe.
What is our Galaxy called?	The Milky Way.
What is over 9 million, million kilometres long?	A light year.
How long does it take the Earth to orbit the Sun?	One year.
Keyword: Planet that orbits a star outside our solar system.	Exoplanet

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High temperature and pressure can turn rocks into what?	
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Name an igneous rock.	
Name a sedimentary rock.	
Name a metamorphic rock.	
Rocks can be broken down by which three processes?	
Keyword: Layers of sedimentary rock.	
The Earth rotates on what?	
What does the Earth orbit?	
Why do we see planets and moons?	
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