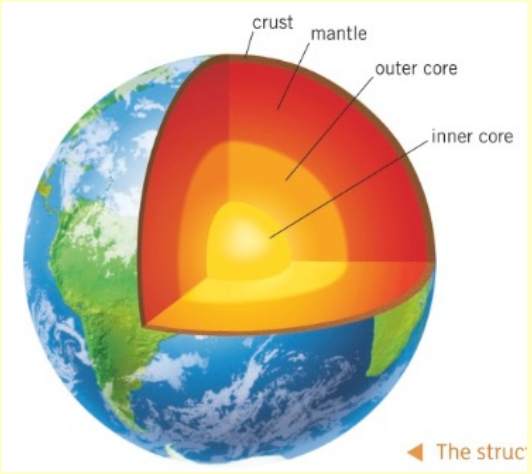
Chemistry C2.4: The Earth

Section 1	The Earth
1 Layers	Inner core (solid) – Outer core (liquid) – Mantle (semisolid) – Crust (solid)
2 Crust	Mostly oxygen, silicon, aluminium and iron
3 Atmosphere	The gases surrounding the Earth
4 Troposphere	The layer of the atmosphere closest to the Earth. Mostly made of nitrogen and oxygen

Section 2	Rock types
6 Sedimentary rocks	Made of broken down rocks (sediment) which has been compacted and cemented together. Porous, permeable, contain fossils
7 Metamorphic rocks	Made when other rocks are heated and pressured. Very hard and strong, have distorted fossils.
8 Igneous rocks	Made when magma or lava cools down. Crystalline, hard, no fossils.
9 Rock cycle	The cycle that changes rocks from one type to another

Section 3	Weathering and erosion processes
10 Chemical weathering	Acid in rain reacts with rocks.
11 Biological weathering	Plants and animals break down rocks
12 Physical weathering	Temperature changes break down rocks
13 Erosion	Rocks hitting each other and breaking
14 Transportation	Rocks being moved usually by water or wind
15 Deposition	Rocks being dropped and settling
16 Compaction	Sediment being squashed together
17 Cementation	Minerals gluing the sediment together into one rock

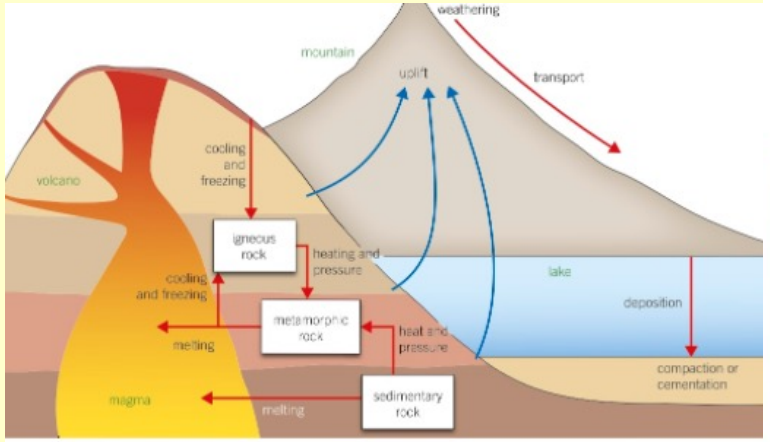


The struc

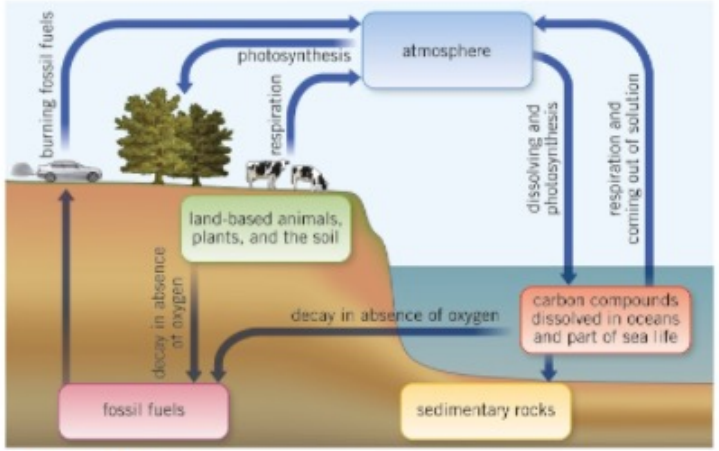
Section 4	Carbon cycle
19 Respiration	Transfers energy from food and plants. Gives out carbon dioxide into the atmosphere.
20 Combustion	Transfers energy from fuel. Gives out carbon dioxide into the atmosphere
21 Photosynthesis	Transfers energy from carbon dioxide and water. Removes carbon dioxide from the atmosphere
22 Dissolving	Takes carbon dioxide into the oceans. Removes it from the atmosphere
23 Carbon stores	Places where carbon is held. Plants, animals, rocks, oceans, atmosphere.

Section 5	Climate change
24 Greenhouse effect	Gases in the atmosphere such as carbon dioxide trap energy from the sun, leading to global warming.
25 Increased greenhouse gases	Combustion of fuels and deforestation leading to excess carbon dioxide in the atmosphere.

Section 6	Recycling
26 Recycling	Collecting and processing materials which have been used so the materials can be used again
27 Advantages	Resources will last longer, uses less energy than making new resources, reduces waste and pollution
28 Disadvantages	Effort of sorting recycling materials, the lorries emit pollution, cannot recycle everything.



The rock cycle.



The carbon cycle.