

Climate

Carbon is recycled through natural processes in the atmosphere, ecosystems, oceans and the Earth's crust (such as photosynthesis and respiration) as well as human activities (burning fuels).

Greenhouse gases reduce the amount of energy lost from the Earth through radiation and therefore the temperature has been rising as the concentration of those gases has risen.

Scientists have evidence that global warming caused by human activity is causing changes in climate.

Methane and carbon dioxide are greenhouse gases.

Earth's atmosphere contains around 78 % nitrogen, 21 % oxygen, <1 % carbon dioxide, plus small amounts of other gases.

Global warming: The gradual increase in surface temperature of the Earth.

Fossil fuels: Remains of dead organisms that are burned as fuels, releasing carbon dioxide.

Carbon sink: Areas of vegetation, the ocean or the soil, which absorb and store carbon.

Greenhouse effect: When energy from the sun is transferred to the thermal energy store of gases in Earth's atmosphere.

Earth Resources

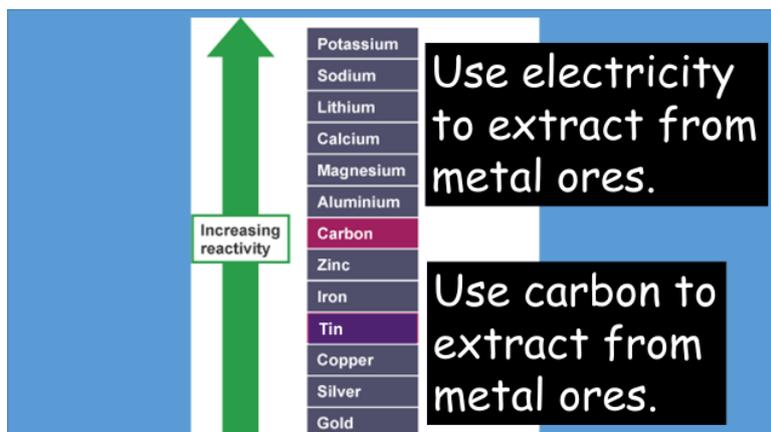
There is only a certain quantity of any resource on Earth, so the faster it is extracted, the sooner it will run out.

Recycling reduces the need to extract resources.

Most metals are found combined with other elements, as a compound, in ores.

The more reactive a metal, the more difficult it is to separate it from its compound.

Carbon displaces less reactive metals, while electrolysis is needed for more reactive metals.



Natural resources: Materials from the Earth which act as raw materials for making a variety of products.

Mineral: Naturally occurring metal or metal compound.

Ore: Naturally occurring rock containing sufficient minerals for extraction.

Extraction: Separation of a metal from a metal compound.

Recycling: Processing a material so that it can be used again.

Electrolysis: Using electricity to split up a compound into its elements.

Subject	Year 8 Earth
Which gas is released by respiration?	Carbon dioxide
What is the formula for carbon dioxide?	CO ₂
Where does the carbon dioxide in the atmosphere come from?	Decomposition, respiration and combustion.
Name two greenhouse gases.	CO ₂ and methane.
How do Greenhouse gases help to keep the Earth warm?	Trap heat energy
Keyword: Gradual increase in surface temperature of the Earth.	Global warming
Keyword: Remains of dead organisms that are burned as fuels.	Fossil fuels
Keyword: Vegetation, oceans, soils, that absorb and store carbon.	Carbon sinks
What percentage of nitrogen is in the Earth's atmosphere?	78%
What percentage of oxygen is in the Earth's atmosphere?	21%
Keyword: Separation of a metal from a metal compound.	Extraction
Keyword: A rock with enough minerals for extracting a metal.	Ore
Which metals are more difficult to extract from their ores?	More reactive metals.
How are less reactive metals extracted?	Use carbon.
How are more reactive metals extracted?	Electrolysis
Reactive or unreactive? GOLD	Unreactive
Reactive or unreactive? POTASSIUM	Reactive
Reactive or unreactive? SODIUM	Reactive
Keyword: Processing a material so that it can be used again.	Recycling
Keyword: Using electricity to split up a compound.	Electrolysis

Subject	Year 8 Earth
Which gas is released by respiration?	
What is the formula for carbon dioxide?	
Where does the carbon dioxide in the atmosphere come from?	
Name two greenhouse gases.	
How do Greenhouse gases help to keep the Earth warm?	
Keyword: Gradual increase in surface temperature of the Earth.	
Keyword: Remains of dead organisms that are burned as fuels.	
Keyword: Vegetation, oceans, soils, that absorb and store carbon.	
What percentage of nitrogen is in the Earth's atmosphere?	
What percentage of oxygen is in the Earth's atmosphere?	
Keyword: Separation of a metal from a metal compound.	
Keyword: A rock with enough minerals for extracting a metal.	
Which metals are more difficult to extract from their ores?	
How are less reactive metals extracted?	
How are more reactive metals extracted?	
Reactive or unreactive? GOLD	
Reactive or unreactive? POTASSIUM	
Reactive or unreactive? SODIUM	
Keyword: Processing a material so that it can be used again.	
Keyword: Using electricity to split up a compound.	

Subject	Year 8 Earth
Which gas is released by respiration?	
What is the formula for carbon dioxide?	
Where does the carbon dioxide in the atmosphere come from?	
Name two greenhouse gases.	
How do Greenhouse gases help to keep the Earth warm?	
Keyword: Gradual increase in surface temperature of the Earth.	
Keyword: Remains of dead organisms that are burned as fuels.	
Keyword: Vegetation, oceans, soils, that absorb and store carbon.	
What percentage of nitrogen is in the Earth's atmosphere?	
What percentage of oxygen is in the Earth's atmosphere?	
Keyword: Separation of a metal from a metal compound.	
Keyword: A rock with enough minerals for extracting a metal.	
Which metals are more difficult to extract from their ores?	
How are less reactive metals extracted?	
How are more reactive metals extracted?	
Reactive or unreactive? GOLD	
Reactive or unreactive? POTASSIUM	
Reactive or unreactive? SODIUM	
Keyword: Processing a material so that it can be used again.	
Keyword: Using electricity to split up a compound.	