Our we damaging our world?

Year 6

Knowing More, Remembering More

Remembering previous learning

What is the weather like in the UK? In the UK, the climate is 'middling' – neither very hot nor very cold. It is called 'temperate', although Scotland tends to be 'coldish', Wales tends to be 'wettish' and Eastern England tends to be 'dryish'. As well as there being climate patterns from one region of the UK to another, there is also a global pattern.

What different climate zones are there across the world? Polar climate zone (very cold); temperate climate zone (neither very hot nor very cold); sub-tropical zone (hot with wet and dry seasons); equatorial, rain forest or tropical climate zone (very hot, wet); desert climate zone (very hot, dry).

What are the effects of the sea and tide? Coastal erosion, the sea wears away the cliffs.

Where does rainfall go when it falls to Earth? The water flows downhill, both over and through the ground, depending on the surface. Rainwater forms streams and rivers.

Where does rainfall come from? Water evaporates from oceans, seas, lakes and the ground.

How is our local area changing? Mass development, expansion of local amenities, destruction of green spaces.

What are the seven continents of the world? Africa, Antarctica, Asia, Australia, Europe, North America, and South America.

Why is it sometimes difficult to ascertain where raw materials and ingredients originate? Labels say where produce was made but not where raw materials come from.

Do plants grow anywhere in the world? No, plants need specific climactic conditions to grow, they are grown in different biomes and seasons.

Do fruits grow all year round? No, they are seasonal eg apples fruit in autumn, strawberries fruit in summer.

How is cotton clothing is produced? Cotton seed pods ripen; they are harvested by farmers; the cotton is spun into thread; thread is woven into cloth; cloth is dyed; the cloth is then sewn into clothes.

What happens to clothing people no longer want? These can be recycled, reused or sent to landfill.

In this unit children will...

- describe and understand key aspects of the distribution of natural resources including energy, minerals and water
- use maps, atlases and globes to locate countries and describe features studied
- use the eight points of a compass, symbols and keys to build their knowledge of the UK and the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies

Key Learning Steps:

1. Are we damaging our world?
2. What are minerals, and do we have an endless supply?
3. Where does our energy come from?
4. Why should we protect our oceans?
5. How can we be more sustainable in school?
6. Can we plan a campaign?

Key Vocabulary:

biodiversity
biomass
conservation
endangered
endangered species
enquiry
environment
extinction
fossil fuels (oil, gas, coal)
geothermal
energy
habitat destruction
hydroelectricity
marine
mineral
non-renewable
ocean (and the names of the world's oceans)
recycle
renewable
solar energy
sustainability
tidal energy
waste
wave energy
wind power

Key Geographers and Inspirational People:

Muhammad al-Idrisi

Gustavo Hinojosa-Arango

David Attenborough

Chris Packham

Knowing More, Remembering More

Knowing more in Y6

What are the threats to the health of our planet? Climate change, deforestation, pollution, overpopulation.

What are the threats to wildlife and/or habitats? Habitat destruction, climate change, pollution, overfishing/hunting, invasive species, pesticides, illegal wildlife trade, climate change, natural disasters.

What ways can we help to improve the health of our planet? Reduce, reuse, recycle, conserve energy, renewable energy, sustainable transportation, protect natural habitats, plant trees, water conservation, education, sustainable agriculture, combat pollution.

What are the sources of important minerals used in everyday life? Many minerals are mined, they can be found all over the world eg diamonds from Africa.

How can minerals be used sustainably? Reusing and recycling, water management, renewable energy, land rehabilitation.

What are renewable and non-renewable energy sources? Non-renewable – fossil fuels (natural resources that are being used up) renewable – wind, solar, hydroelectric energy (endless sources of energy).

What is the 'carbon cycle'? The carbon cycle is nature's way of reusing carbon atoms, which travel from the atmosphere into organisms in the Earth and then back into the atmosphere over and over again.

How do humans rely on the oceans? Transportation, food, climate/weather regulation, jobs.

What are the threats to our oceans? Pollution, climate change, overfishing, extraction of oil and gas from the seabed, habitat destruction, the introduction of alien species (from other ecosystems).

What are the advantages of Marine Protected Areas (MPAs)? maintain biodiversity and provide refuges for endangered and commercial species.
protect critical habitats from damage by destructive fishing practices and other human activities, and allow them to recover.
provide areas where fish are able to reproduce, spawn and grow to their adult size.
increase fish catches (both size and quantity) in surrounding fishing grounds.
build resilience to protect against damaging external impacts, such as climate change.
help to maintain local cultures, economies and livelihoods which are intricately linked to the marine environment.