

## Knowledge Organiser Year 6 – Our Changing World

### What will I know by the end of this unit?

- Climate change is a term used by experts when describing the way that both weather and climate systems are changing as a result of mankind's industrial activity across the world.
- Global warming (a large part of climate change) is the increase in temperature of Earth. Hotter weather might sound lovely but the reality is very different.
- Deforestation is the name given to the destruction of the rainforest and this is being done by burning them down, chopping down the trees or flooding the areas.
- Renewable energy comes from natural resources that are naturally replenished, such as sunlight, wind and waves. Non-renewable energy comes from natural resources that are not naturally replenished, such as oil and coal.
- The amount of carbon you produce as a result of your daily activities is known as your carbon footprint. Everything we do has an impact on the environment. If we made small changes to our daily routine, we could reduce our carbon footprint and have a positive effect on the environment.
- How far our food has travelled is called **food miles**. The further our food travels from where it is **produced**, the more CO<sub>2</sub> is likely to be released, contributing to climate change.
- It is important to **conserve** food, water and energy supplies because it is good for the planet and for future generations.
- Increased pollution is causing global warming. As our planet heats up, extreme weather, floods and droughts are more likely to occur. These in turn affect farming, food **production** and access to drinking water. These events can have a knock on effect around the whole world.

### Vocabulary

Carbon Dioxide	Doing something that burns fuel will make carbon dioxide gas in the smoke.
Carbon Footprint	The term carbon footprint is how much carbon goes into the air because of something done by people.
Climate	The weather conditions in an area in general or over a long period.
Climate Zone	Climate zones are areas with distinct climates
Conserve	Use as few resources as possible.
Deforestation	Deforestation is the clearing, or cutting down, of forests.
Erosion	Erosion is the wearing away of the land by forces such as water, wind, and ice.
Fertile Land	Land that is rich in nutrients and very good for growing crops.
Global Warming	The increase in Earth's average temperature over a long period of time.
Non - renewable Energy	A source of energy that will eventually run out as it cannot be made as quickly as it is consumed, such as coal.
Renewable Energy	Renewable energy uses energy sources that are not "used up". For example, solar power from the sun is renewable as we won't "use up" all the sunlight from the sun.
Solar Energy	Energy that comes from the sun, using solar panels to generate electricity.
Sustainability	Sustainability means using natural resources in a way that we could keep doing for a long time.
Weathering	Weathering is the process where rock. is dissolved, worn away or broken down into smaller and smaller pieces.

### What should I already know?

- Land-use patterns in the local area and how they have changed over time.
- Understanding of climate and zones
- When people are looking to find a new home or new places are being built for people to live, there are many different needs to consider - food, water and shelter, electricity, internet access, healthcare, entertainment, friends, transport links, information and news
- Trade in UK and Fairtrade.
- Our food comes from all over the world.

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Renewable Energy		
Renewable energy is made from resources which nature can replace, it is more environmentally friendly as it does not pollute the air or water.		
wind power	solar power	hydro-power



Types of Power Station			
Electricity is made in power stations, transferred via pylons, through wires and into our homes.			
Coal - burning coal.	Combined Cycle Gas Turbine (CCGT) - burning gas.	Nuclear - uranium atoms split in a process called nuclear fission.	Pumped Storage - water in dams used to turn turbines.
			

