

Key Facts

What you will learn by the end of the topic

MISSION: BIOMES



- I can:
- explain the difference between climate and weather.
 - identify the climate of the UK based on its position on the Earth.
 - use Digi-maps to explain changes in the local area over time (human and physical characteristics).
 - use maps (Digi-maps), aerial photographs and e-resources to describe the locality of the two different biomes of the world: Australian fires and Antarctica melting ice caps and make comparisons to more recent images after deforestation/increases in temperature and melting of the ice caps.
 - explain how the climate of the UK has changed over time and what it looks like.
 - explain the Natural Greenhouse Effect.
 - look at how human activity has increased global warming and what this means for the Earth.
 - identify the main biomes of the Earth (rainforest, desert, grassland/savannah, tundra) and their physical features – discuss and predict the effect climate change will have on these areas of the world.
 - research and identify the climate of biomes and write a discussion on the effect of climate change on these areas.
 - use knowledge of the Antarctic from Spring to identify the impact of climate change on this area of the world.

Climate change is a term used by experts when describing how the weather and climate systems are changing because of human industrial activity



Melting glaciers means more water in the seas and more areas of land being flooded

Global warming (a large part of climate change) is the increase in temperature of the Earth. Hotter weather may sound lovely but the reality is very different



Hotter temperatures mean parched land and fewer crops for people to eat.

Deforestation is the name given to the destruction of the rainforest either by burning the trees, chopping them down or flooding the areas.



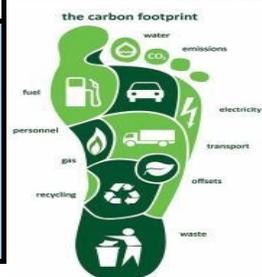
Fewer trees means less oxygen and more carbon dioxide in the atmosphere

Renewable energy comes from natural; resources that we can't use up such as sunlight, wind and waves. Non-renewable energy comes from natural resources that are used up such as oil and coal.



Renewable energy is good as we are not using up all of the Earth's natural resources

Carbon footprint is the amount of carbon you produce as a result of your activity. Everything humans do has an impact on the environment. We only need to make small changes to reduce our carbon footprint and have a positive effect on climate change



- Reducing our carbon footprint is easy
- Recycle waste
- Walk or cycle
- Turn off lights
- Use less water

Key Vocabulary

Climate	Weather conditions in an area of a country or the world.
Climate zones (biomes)	Climate zones or biomes are areas of the world with distinct climates (see map)
Erosion	Is the wearing away of land by forces such as water, wind and ice
Weathering	Weathering is the process where rock is dissolved, worn away or broken down into smaller and smaller pieces
Sustainability	Means using natural resources in a way that that we can keep doing for a long time e.g. solar panels and wind farms
Carbon Dioxide (Greenhouse gas)	Is a gas that is produced by burning things. It is known as a greenhouse gas because too much carbon dioxide causes an increase in the Earth's temperature (global warming)
Extreme weather	Is a weather event such as drought, flood, hurricane, snowstorm that causes damage to property and a threat to life.
Greenhouse effect	Is where the gases in the Earth's atmosphere (carbon dioxide) trap the sun's heat and keep the Earth warm. The burning of oil and coal produces a lot of carbon dioxide so there is more gas to trap the sun's heat and the Earth gets warmer. Plants help by using up carbon dioxide and producing oxygen