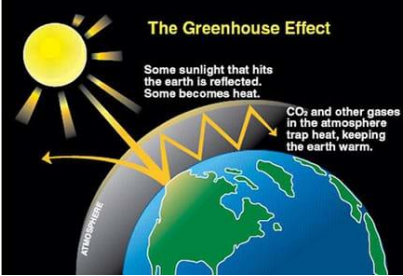




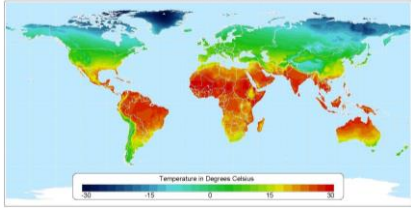
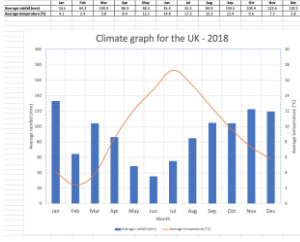
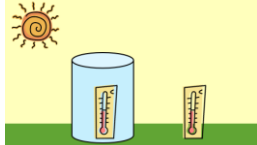



How is our world changing?

The Greenhouse Effect	Causes of global warming	Actions to combat climate change
<p>The Greenhouse effect is the natural process by which the earth's atmosphere traps solar radiation, warming the earth enough to support life. Without the natural greenhouse effect, the earth's average temperature would be around -18°C. This would be far too cold to sustain many forms of life.</p> 	<p>Some causes of global warming:</p> <ul style="list-style-type: none">Burning fossil fuelsDeforestation (cutting down trees)Food Production	<p>Your carbon footprint is the amount of carbon dioxide released into the air because of your own energy needs. To help combat climate change, you can consider ways of lowering your carbon footprint.</p>  <ul style="list-style-type: none">Learn the 5 R's: refuse, reduce, reuse, rot and recycle.Bike more and drive less.Conserve water.Eat seasonally, locally and less meat/dairy.Switch to sustainable, clean energy.

Key Vocabulary	
Atmosphere	A mixture of gases that surrounds the Earth.
Carbon footprint	A measure of the impact our activities have on the environment.
Climate change	A change in global or regional climate patterns.
Fossil fuels	Sources of non-renewable energy, such as coal and gas, formed from the remains of living organisms that were buried millions of years ago.
Greenhouse effect	A process that occurs when gases in earth's atmosphere trap the sun's heat.
Renewable energy	An energy source that cannot be depleted and are able to supply a continuous source of clean energy.
Vegetation belt	An area with distinct plant types, determined by climate, soil, drainage and elevation..




How to be a Geographer			
To interpret temperature maps independently.	<p>Average Annual Temperature</p> 	To interpret weather and climate graphs independently	
To test out the Greenhouse effect.	<ol style="list-style-type: none">Lay two thermometers side by side outdoors and record the temperature shown by each thermometer.Cover one of the thermometers with the large jar - this is the greenhouse.Then read the temperature of the two thermometers after 30 minutes and again after an hour. 	To interpret aerial photographs.	<p>aerial photograph</p> <p>a photograph taken from an aircraft</p> 

Some of the effects of global warming:


- Glaciers melting
- Ocean levels will rise
- Animals' habitats are changing
- Extreme weather conditions

Earth's atmosphere is composed of about 78% nitrogen, 21% oxygen, and one percent other gases!

Types of Renewable Energy Sources




① Hydropower




Gravitational potential energy of water converted into electrical energy through a hydraulic turbine

② Wind Energy




Kinetic energy of wind converted into electricity by wind turbines

③ Solar Energy




The sun's energy turned into electricity heat energy by solar panels/solar heaters

④ Biomass




Energy obtained from plant & animal remains; e.g, burning wood produces heat energy

⑤ Geothermal Energy




Heat energy trapped underneath the earth's crust converted into electricity by steam turbines

⑥ Ocean Energy



Oceanic thermal and tidal energy converted into electricity by turbines and other systems

⑦ Hydrogen



Hydrogen's potential chemical energy converted into electricity by Hydrogen fuel cells