St Robert Southwell Catholic Primary School

Aiming For Excellence - Being The Best We Can Be

Year 4 Geography Knowledge Organiser- Looking After Our Planet

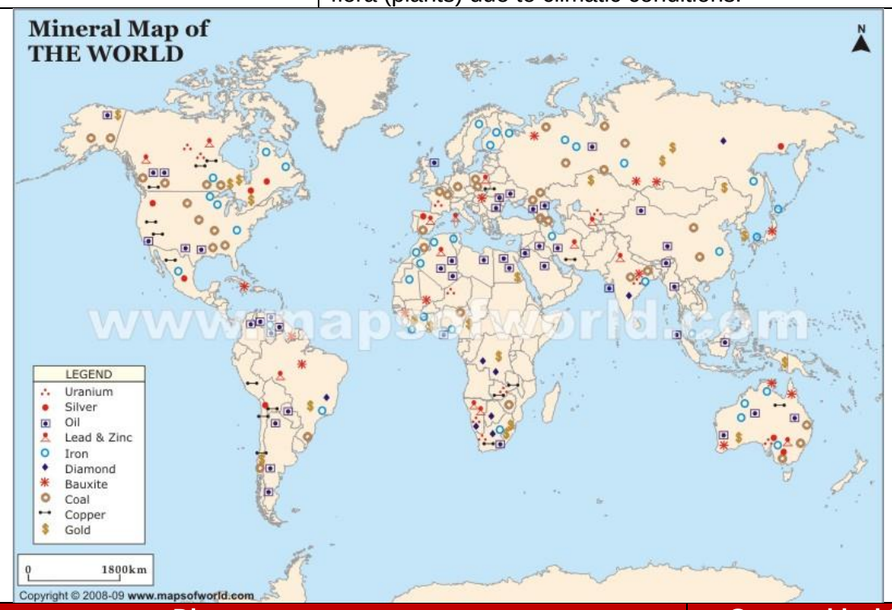
What should I already know?

There are 7 continents and 5 oceans.

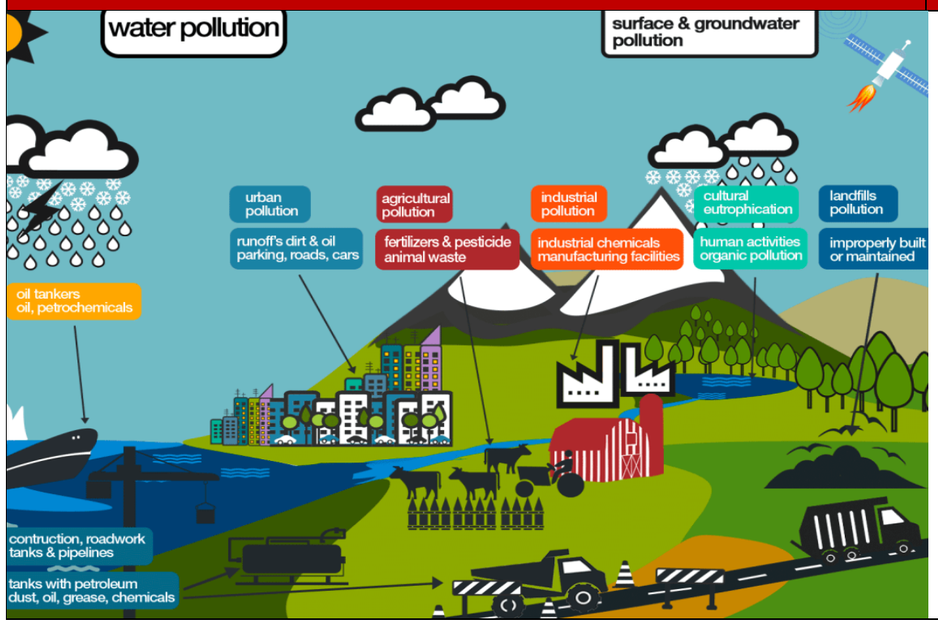
Climate is the average weather conditions of a place, including rainfall and temperature.

A biome is a community of plants and animals that have common characteristics for the environment they exist in.
area.
A vegetation belt is an area of the planet characterised by certain flora (plants) due to climatic conditions.

Maps



Diagrams



Geographical Skills and Enquiries

Investigating the school grounds to encourage wildlife.

Investigating school sustainability.

Pose scientific enquiry questions and gather evidence from around the school.

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.

Vocabulary

Atmosphere	A layer of gases surrounding a planet.
Air pollution	the presence in or introduction into the air of a substance which has harmful or poisonous effects.
Biomass	biological material derived from living, or recently living organisms
Climate	the average weather conditions for a place usually measured over a long period
Environment	everything in the world around us that surrounds and affects all life on earth, including the air, food chains, the water cycle, plants, animals and other humans.
Fossil fuels	Fuels that come from old life forms that decomposed over a long period of time. The three most important fossil fuels are coal, petroleum, and natural gas
Geothermal energy	heat drawn from inner layers of the Earth
Human feature	created by humans, e.g. roads, houses and canals
Hydro Electricity	electricity that is created by the flow of water
Latitude	how far north or south a place is from the equator.
Mineral	a mineral is a substance that occurs naturally
Non-renewable energy	energy from a source that can be used up and no longer be available
Physical feature:	naturally occurring feature, e.g. rivers and mountains
Recycled:	‘discarded’ or ‘end-of-life items’ converted into a reusable item or material
Renewable energy	energy source that will never be used up
Solar energy	sunlight into electricity
Sustainability	ability to maintain balance between natural ecological systems through not harming the environment or using up resources that will run out
Tidal energy	a form of hydropower that converts the energy of tides into useful forms of power
Wave energy	the capture of energy from ocean surface waves for electricity generation
Wind power	energy extracted from wind using wind turbines to produce electrical power.

Important facts

Types of energy
There are two types of energy: renewable and non-renewable. **Non-renewable** energy includes coal, gas and oil. Most cars, trains and planes use non-renewable energy. They are made by burning fossil fuels to create energy. **Renewable** energy includes solar, hydro and wind energy. Wind energy is made when the wind moves the blades on a wind turbine. This movement creates wind energy which is converted into electrical energy.

The carbon cycle

Carbon is an essential element for life on Earth. Every living organism has carbon compounds inside each of its cells, such as fats and proteins. The carbon cycle shows how atoms of carbon can exist within different compounds at different times and be recycled between living organisms and the environment.

What is the difference between a mineral and a rock?
Minerals have a specific chemical structure which is the same throughout the entire mineral. Rocks, on the other hand, are composed of a variety of different minerals and are not consistent throughout their structure.

Quiz

1. What is the power produced by the sun called?
2. What is the ozone layer?
3. What is the effect of burning fossil fuel?
4. How is life and pollution different in different parts of the world?
5. List 4 things humans can do to protect the environment.