

River Bank Primary Knowledge Organiser	Year Four	Spring 1	Geography – Climate Change and Pollution
Key Vocabulary		Important Facts	
<ul style="list-style-type: none"> - Biome - areas of our planet with similar climates, landscapes, animals and plants. - Climate – the average of rainfall, temperature, humidity and wind-speed of an area - Garbage Patches – huge areas of plastic on the ocean - Corporate – relating to large companies / businesses - Marine – animals and plants in the ocean / sea biome - Atmosphere – a layer of gases 500km above the earth - Global Warming – referring to the process where the temperature of the Earth's temperature is increasing due (mainly) to carbon dioxide trapping the Earth's heat in, like a blanket. - Carbon Dioxide – a gas which is produced by the burning of fossil fuels such as oil, gas and coal; car exhausts / transport and animals and humans - Fossil Fuel - a finite resource made naturally over millions of years from the remains of living things. It includes, gas, oil and coal. - Finite – a limited amount - Degradation – the wearing down / breaking down / ruining 		<ul style="list-style-type: none"> - Know that biomes are areas of our planet with similar climates, landscapes, animals and plants. - Know that examples of biomes are: <ul style="list-style-type: none"> o Tropical rainforests o The oceans / seas o Savannah o Woodlands - Know that what lives in each biome depends on: <ul style="list-style-type: none"> o how warm or cold it is (temperature) o how dry or wet it is (rainfall) o how fertile the soil is - Know that biomes are valuable to humans and that they are also worth protecting in their own right (i.e. regardless of their use to humans) - Know that our oceans are under threat from pollution - in particular plastics - Know that while some plastic ends up in the ocean due to: <ul style="list-style-type: none"> o intentional dumping (for financial reasons) o large amounts are blown into the sea from the land - Know that the plastic in the oceans can be deadly to marine life and that once it has entered the food chain it can cause health problems for humans - Know that there are massive 'garbage patches' in the Atlantic, Pacific and Indian oceans and that all of the world's oceans are affected by plastic pollution - Know that a sketch-map is a roughly drawn map with basic details 	

- Know that a **sketch-map** will include:
 - A key
 - Title
 - Roads / Parks / Schools / Shops / rubbish / recycling bins / location of plastic pollution
 - Compass Directions
 - Draw to a rough scale
- Know that a lot of plastic can be recycled, but that creating less plastic waste in the first place is an even better solution than recycling
- Know that there has been a greater focus on reducing plastic waste over the last 5 years, mainly due to The Blue Planet Documentary
- Know that reducing plastic consumption has come in the form of:
Governmental / Corporate
 - Charging people for plastic bags at supermarkets
 - Companies reducing the amount of plastic straws it uses (McDonalds / Cinema chains)
 - Banning '**single-use**' plastics such as straws, cotton buds and drink stirrers
 - Supermarkets having 'plastic-free' isles
 - Evian insisting that its plastic bottles are ONLY made from recycled plastic.
Personal
 - Using reusable gas at supermarkets
 - Making sure plastic waste is put in a recycling bin
 - Use refill services for coffee / drinks etc
 - Use reusable items (batteries / cloths instead of wipes)
 - Buy loose fruit and veg and not those wrapped in plastic
- Know that Earth is surrounded by a layer of gases called the **atmosphere** that is roughly 500 km high above Earth but most of it is within 15 km of the Earth's surface

	<ul style="list-style-type: none"> - Know that the most common gas in the atmosphere is nitrogen, but that other important gases in our atmosphere include oxygen and carbon dioxide - Know that our atmosphere acts like a blanket that traps the Sun's heat and causes the temperature of the Earth to increase – this is called Global Warming. - Know that people on Earth are making carbon dioxide, mainly through: <ul style="list-style-type: none"> o transport o manufacturing and agriculture o Burning of oil, coal and gas - Know that the population of the world is currently increasing; know that the global population is currently close to 8 billion and is projected to peak at 11 billion in around the year 2100. - Know that oil is an example of a fossil fuel, meaning that it is a finite resource made naturally over millions of years from the remains of living things - Know that global warming is leading to more extreme weather events including floods and droughts; this is making certain parts of the world much harder to live in leading to increased movement of people, called migration; know that the availability and contamination of water is a major reason for this migration - Know that global warming is also leading to degradation of many habitats, and that the loss of polar ice which threatens polar bears is an example of this
Pollution Earth – the planet that we live on Habitats - the natural home or environment of an animal or plant.	<ul style="list-style-type: none"> - Know that Earth is surrounded by a layer of gases called the atmosphere that is roughly 500 km high above Earth but most of it is within 15 km of the Earth's surface

Biome – a biome is a larger area than a habitat that contains a number of habitats

Global warming – the heating up of our planet

Atmosphere – the layer of gases surrounding the earth.

Gas – a substance made up of particles that float

Oxygen - colourless, odourless gas that is the life-supporting component of the air.

Carbon dioxide - a colourless gas produced by burning fossil fuels and plants absorb it.

Nitrogen – a colourless and tasteless element that occurs as a gas which makes up a large part of Earth's atmosphere

Natural resources - raw material that comes from the environment and is used to make products or provide value to humans

Fossil fuels - natural fuel such as coal or gas, formed in the distant past from the remains of living things (plants or animals)

Oil – a liquid used as a fuel

Global warming – the current rise in the Earth's temperature of the air and oceans.

Heat island - an urban area that is warmer than the surrounding areas

Population - all the inhabitants of a place

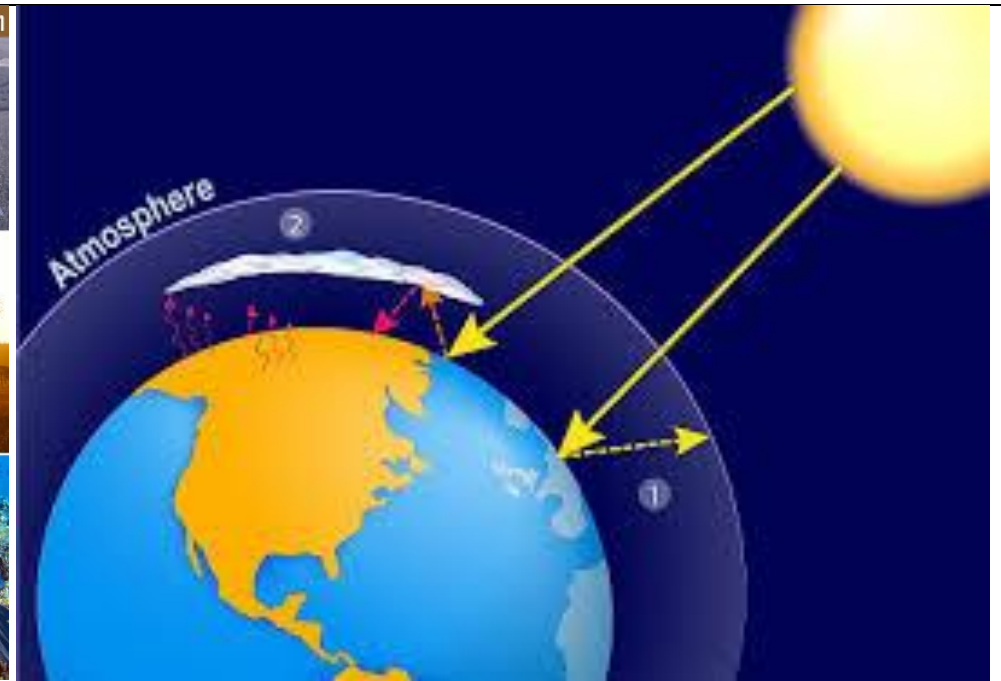
Extreme weather - an unusual weather event that is rare for a specific time of year and location.

Flood - large amount of water on what is normally dry land.

Drought – a long period of dry weather when there is a lack of rainfall

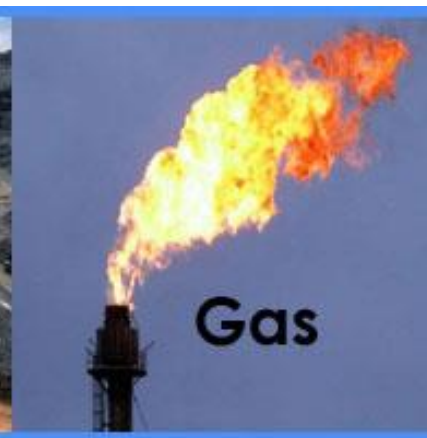
Contamination – the making of something unclean

- Know that the most common gas in the atmosphere is **nitrogen**, but that other important gases in our atmosphere include **oxygen** and **carbon dioxide**
- Know that our atmosphere acts like a blanket that traps the **Sun's heat** and causes the temperature of the Earth to increase – this is called **Global Warming**.
- Know that people on Earth are making **carbon dioxide** through: transport, manufacturing and agriculture and burning oil, coal and gas
- Know that the population of the world is currently increasing; know that the **global population** is currently close to 8 billion and is projected to peak at 11 billion in around the year 2100.
- Know that oil is an example of a **fossil fuel**, meaning that it is a finite (there is a limited amount) resource made naturally over millions of years from the remains of living things
- Know that global warming is leading to more **extreme weather** events including **floods** and **droughts**; this is making certain parts of the world much harder to live in leading to increased movement of people, called **migration**; know that the availability and contamination of water is a major reason for this migration.
- Know that global warming is also leading to degradation of many **habitats**, and that the loss of polar ice which threatens polar bears is an example of this



(Taiga: snow forest)

What Is a Sketch Map?



www.DrillHillFarm.com