

What is sustainability?

Sustainability is the **balance**, or equality, between the **environment, economy and us** as people, though we **act** as if there is another **planet** to go to once we have finished destroying this one - **there is not!** The vital three are now becoming a terrible two as we **neglect the nature** that makes our planet whole.



So far we have been using **unsustainable sources** to produce energy and aid our living but simple changes can be made to stop these **drastic problems**. One of our main problems is fossil fuels, **fossil fuels** consisting of oil, coal and gas. These harmful

methods are damaging our planet by **destroying** our **atmosphere** which protects us from the sun's powerful rays.

The **environment** does not exist as a sphere separate from human **actions, ambitions and needs**.

What is climate change?

Climate change is the process of the earth heating up. The effects of climate change are devastating. Ice is melting in the north and south pole.

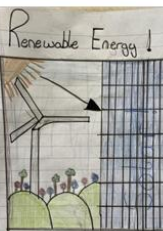
The amazon is getting warmer and hot countries are turning to ash. The earth is burning because we are using up all of the earth's resources too quickly and not doing enough to repair the damage we are causing. There are too many bad gases, like carbon, and not enough good gases. This makes our earth hot and things don't work well. Animals can stay to die, whole groups of animals can become extinct and then the world is in trouble.

Fossil fuels

Fossil fuels are and aren't amazing, which makes it a controversial thing for the planet. Fossil fuels are a non-renewable source of energy, which means once they run out we will have to move to more renewable sources of energy.

Written by Adam Hayter, James Kelly, Ryleigh Morgan, Max Hunter and Sophie Case

Every day, a scarce few people strive to make a change.
BE ONE OF THEM!



Is plastic fantastic?

It takes millions of years for plastic to dissolve. Did you know we are also producing 300 million tons of plastic every year? 50% of which is for single use purposes.

MICRO PLASTICS AREN'T FANTASTIC!

Plastic is one of our biggest problems. It takes thousands of years to biodegrade. When plastic starts to break down there are tiny pieces of plastic left. These are called micro-plastics.

Plastics in the ocean...

Plastics in the ocean can be awful for the sea creatures. One of the problems with plastic is where animals, all over the world, think it is food and swallow it. Then animals can't digest it and it poisons them and stops them eating food they actually need. One hundred million marine animals die to plastic each year!

Bioaccumulation



Bioaccumulation is where a **large creature** eats a **smaller creature** that has **chemicals** in it (like plastic) but the big creature does **not know** this. The **diagram** below says that, if a small fish eats 3 micro plastics, then a medium fish eats 10 of these fish, then the medium fish has eaten 30 bits of plastic. Finally, if the big fish eats 10 of the medium fish then the big fish has 300 micro plastics in his/her belly. And so on.

We need to stop throwing plastics into the ocean

We need to stop littering because litter can fly into the ocean

DID YOU KNOW...
animals at the bottom of the ocean take longer to grow up? They eat micro-plastics and it destroys their life cycle. Soon all of the animals at the bottom of the ocean will be extinct because of the amount of plastic litter.

Written by Alexia Bright, Amy Kemp, George Kennedy, Harry Perity, Isaac Bates, Ivy Cross, Jack Harris, Lola Wilmer and Zoe Saldanha



DID YOU KNOW...
there are plastic islands floating in our seas? These are called 'garbage patches' and one of them is triple the size of France!

Renewable energy

Renewable energy sources don't cause harm to the environment unlike fossil fuels which accomplish destroying our planet. Non-renewable items will run out eventually. Renewable energy does not emit emissions whereas non-renewable energy does. Solar panels, wind turbines, hydroelectric dams and geothermal energy are all renewable sources. Renewable sources of energy are reliable if you choose the right type for your country. Some examples...

Solar power works by consuming the sun's rays and converting it to energy. When the sun hits the solar panels electrons start bouncing around creating electricity. When the sun hits the solar panels a direct current is made and an inverter is used to change the direct current to an alternating current so we can power our houses.

Here in the UK, we have the right geology for wind turbines. Wind turbines have propellers so that when the wind blows they spin and create our energy. One wind turbine can create enough power to supply 1,000 homes. Why aren't we using them more? The energy from wind turbines is stored in tanks under the ground.

Written by Ashlyn Argumosa, Erin Tindall, Imy Wise, Kiera Peck, Ollie Dixon and Seb Kewin



DID YOU KNOW...
that bubble gum is made of plastic? People used to chew on chicle, which is tree sap. Now chewing gum is made from polymer. That's a plastic made from oil that's similar to car tyres.
Written by Abbie Watson and Lily Rogers

Heroes of the World

Some of us know the people who are trying to save world like Greta Thunberg or David Attenborough. Greta Thunberg is a young woman who is a Swedish animal activist who is trying to stop climate change. Sadly, most people are turning a

blind eye so we need to help her **shout** and protest the message to **SAVE OUR WORLD!** David Attenborough is another famous animal activist who has spent many years of his life trying to stop Climate change.

Be the change you want to see!

People all over the world who care about the environment and want to stop climate change Should make banners and walk around the streets with them to get

their message across. So, if you have a message and you care about climate change please help by making one just like we did!

This is our world and we need to save it!

Written by Tristan O'Leary and Honor Tayebwa Lily Missions and Vlad Quantrill



Destroyed rainforests and sea kelp

We are destroying too many rainforests! Enough is enough! We breathe out carbon dioxide which trees need and trees breathe out oxygen which we need. If we cut down too many trees we will lose the precious oxygen we need and will contribute towards more greenhouse gases. People are also destroying our sea kelp and sea weed resources. **DID YOU KNOW...** that seaweed and sea kelp help us to absorb carbon and it also let's out oxygen. This helps to lower the greenhouse gases and to help humans breathe. Worthing are banning boats, from going fishing 4km in from the seashore.

We need more countries to do this as it stops fishermen from killing our sea life. **Written by Bea Harrington and Rebecca Williams**



Our world leader in clean energy... ICELAND

Iceland uses lots of renewable energy thanks to its remarkable geography and geology. Iceland is full of hydrothermal and geothermal resources. At the beginning of the 20th century Iceland was one of the poor countries in Europe. Now Iceland is in the top 20 richest countries in the world. We should be proud to have Iceland on our planet today and to learn from them on how to be nearly 100% for renewable energy sources. Iceland wants to inspire more countries to be more like them and they are working on a project to help East Africa because it has a lot of geothermal ways to produce energy. Look for volcanic sites and there you will find hydrothermal and geothermal energy sources.

Written by William Blackwood and Zoe Cheung