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KIDS

INTRODCUTION TO CLIMATE CHANGE FOR KIDS  
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We've all heard of it, **but what is climate change and what is it doing to our planet?**



**So, what is climate change?**

**Climate change** (or **global warming**), is the process of our planet heating up.

The **Earth** has warmed by an average of **1°C** in the last century, and although that might not sound like much, it means big things for people and wildlife around the globe.

Unfortunately, rising temperatures don't just mean that we'll get nicer weather – *if only!* The changing climate will actually make our weather more **extreme** and **unpredictable**.

As temperatures rise, some areas will get wetter and lots of animals (and humans!) could find they're not able to adapt to their changing climate.

Source:

What causes climate change?

### 1. Burning fossil fuels



Over the past **150 years**, **industrialised countries** have been burning large amounts of **fossil fuels** such as **oil** and **gas**. The gases released into the **atmosphere** during this process act like an invisible 'blanket', trapping heat from the sun and warming the Earth. **This is known as the "Greenhouse Effect"**.

### 2. Farming



Believe it or not, cows' eating habits contribute towards greenhouse gases. Just like us, when cows eat, **methane gas builds up in their digestive system and is released in the form of... a fart!** This might sound funny, but when you imagine that there are almost **1.5 billion** cows releasing all that gas into the atmosphere, it sure adds up!

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### 3. Deforestation



Forests absorb huge amounts of **carbon dioxide** – a greenhouse gas – from the air, and release oxygen back into it. The **Amazon rainforest** is so large and efficient at doing this that it is often called '**the lungs of the Earth**'. Sadly, many rainforests are being cut down to make wood, palm oil and to clear the way for **farmland, roads, oil mines, and dams**.

#### How will climate change affect the planet?

The Earth has had many **tropical** climates and **ice ages** over the billions of years that it's been in existence, so why is now so different? Well, this is because for the last 150 years human activity has meant we're releasing a huge amount of harmful gases into the Earth's atmosphere, and records show that the global temperatures are rising more rapidly since this time.

A warmer climate could affect our planet in a number of ways:

- **More rainfall**
- **Changing seasons**
- **Shrinking sea ice**
- **Rising sea levels**

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How will climate change affect wildlife?

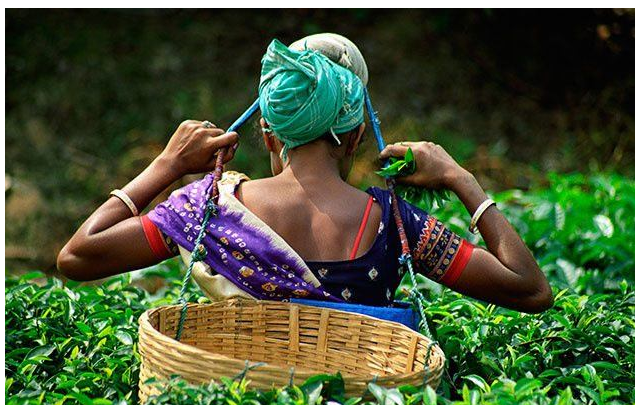


Climate change is already affecting wildlife all over the world, but certain species are suffering more than others. **Polar animals** – whose icy natural habitat is melting in the warmer temperatures – are particularly at risk. In fact, experts believe that the **Arctic sea ice** is melting at a shocking rate – **9%** per decade! **Polar bears** need sea ice to be able to hunt, raise their young and as places to rest after long periods of swimming. Certain **seal** species, like **ringed seals** make caves in the snow and ice to raise their pups, feed and mate.

It's not just polar animals who are in trouble. **Apes** like **orangutans**, which live in the rainforests of **Indonesia**, are under threat as their habitat is cut down, and more droughts cause more bushfires.

**Sea turtles** rely on **nesting beaches** to lay their eggs, many of which are threatened by rising sea levels. Did you know that the temperature of nests determines whether the eggs are male or female? Unfortunately, with temperatures on the rise, this could mean that many more females are born than males, threatening future turtle populations.

How will people be affected by climate change?



Climate change won't just affect animals, it's already having an impact on people, too. Most affected are some of the people who grow the food we eat every day. Farming communities,

**Source:**

especially in **developing countries**, are facing higher temperatures, increased rain, floods and droughts.

Most developed countries love a good **cuppa**, ( cup of tea) (around **165 million** cups of the stuff every day!), but we probably take for granted just how much work goes into growing our tea. Environmental conditions can affect the flavour and quality plus it needs a very specific rainfall to grow. In Kenya, climate change is making rainfall patterns less and less predictable. Often there will be droughts followed by huge amounts rain, which makes it very difficult to grow tea.

Farmers might then resort to using cheap **chemicals** to improve their crop to earn more money, even when long-term use of these chemicals can destroy their soil.

**How are people coping with climate change?**



Buying **Fairtrade** products (**Fair trade** is an institutional arrangement designed to help producers in developing countries achieve better trading conditions) can help make sure a farmer is paid a fair wage. This means they can cover their costs, earn enough money to have a decent standard of living, and invest in their farms to keep their crop healthy, without needing to resort to cheap methods of farming which can further damage the environment.

This support also helps farmers to replace **eucalyptus trees** – which take up a lot of water – with **indigenous trees** that are better for the farmers' soil. They can learn to make **fuel-efficient stoves** which will not only make them a little extra money, but also reduce the **carbon footprint** of the community – *cool!*

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How can I help prevent climate change?



Small changes in your own home can make a difference, too. **Try switching to energy-saving lightbulbs, walking instead of using the car, turning off electrical items when you're not using them, recycling and reducing your food waste.** All these little things can make a difference.

## FIVE TOP CONSERVATION TIPS!

How can you help save our planet?

Check out these five super-simple environment-saving tips...



### 1. Avoid Palm Oil!

Love biscuits? You're not the only one – Britain consumes a whopping 4.4 million biscuits every day! But while everyone is aware that biccies aren't the healthiest of treats, what a lot of people don't know is that biscuits can also be bad for the planet. That's because most of them contain **palm oil**, and to make way for palm oil plantations, **rainforests are being destroyed**. In fact, palm oil production is one of the biggest reasons for deforestation around the world. As forests are torn up, the endangered species that live in them — like orangutans, elephants and gorillas — suffer too.

**What's In it?** Palm oil is not just found in biscuits — it's also in **thousands of other items**, from sausage rolls and bread to make-up, soaps and even a new type of fuel.

**What Can You Do?** Don't worry – we're not suggesting a total biscuit boycott! Thankfully, more companies are using **sustainable palm oil**, which is grown in ways which doesn't destroy rainforests and other vulnerable habitats..

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## 2. Turn Off The Taps!

You wouldn't flush the toilet the whole time you were on it, would you?! But some folks leave the tap running while they're cleaning their teeth – which could waste 35,000 litres of water per family per year. So remember to **turn those taps off** while you're brushing – because you'll save water AND money. Bonus!



## 3. Be Switched On – Switch Off!

We are sure you already turn the lights off when you leave a room. But have you noticed those other little lights that continue to glow in the dark? The tiny red or green ones on your TV, computer and stereo? Well, those “stand-by” lights show that energy is still being used. So **switch off all your gadgets** at the mains. It could cut electricity use in your home by up to 10%. Wow!



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#### 4. Don't Be Car Crazy!

Sometimes car journeys are unavoidable, like when you've got a massive supermarket shop to do, or the whole family goes to visit Grandma. But are all of them *really* necessary? **Walking, cycling** and taking **public transport** are way better for the planet – especially when you think that a double-decker bus carries the same number of people as 20 cars!



#### 5. Say "No" To Plastic Bags!

Did you know that a single plastic bag can take up to 500 years to fully disintegrate in landfill? And that around 1 trillion bags are used every year worldwide? Wow! Next time you hit the shops, **take a reusable canvas bag** with you, instead. Simple!