



Colour in Your Carbon Footprint

Carbon dioxide (CO₂) is a greenhouse gas that causes **climate change** if there's too much of it in the atmosphere. Many human activities, such as making things in factories and animal agriculture, have produced **lots** of CO₂. A person's **carbon footprint** is the amount of CO₂ released into the air as a result of their actions.

This activity is a fun way for your students to **visualise** their carbon footprint by colouring in the areas of the illustration that are most relevant to their **lifestyle**. The larger the area students color in (the outer rings), the larger their carbon footprint. Each student should have a copy of the handout as well as colour pencils.

Following the activity and as a class, we recommend brainstorming ways in which students could **reduce** their carbon footprint in each of the categories.

Solutions

Home: Larger homes require more energy to heat, cool and light up. This energy often comes from fossil fuels, which produce nasty gases like CO₂. Although it is unlikely any of your students have a say in the size of their home, there are ways they can help their household to consume less energy: by closing windows and doors when heating or air conditioning is on, by unplugging appliances that aren't in use, by turning off lights when not in use, etc.

Energy: Leaving the lights on all the time and even when they're not needed can waste lots of energy. The best thing to do is to turn your lights off if you don't need them. If possible, it's also best to use energy-efficient light bulbs.

Water: Pumping water into homes requires lots of energy. In order to use less energy, it is best to try and take short showers. Taking baths can be very relaxing, but it's best to avoid taking baths if ever possible. Running taps and leaky pipes can also waste a lot of water.





Teacher's Guide



Waste: Food items that end up in landfills can release greenhouse gases as they break down. What's more, if waste goes astray, it can accidentally pollute waterways and other areas too. You can compost your food scraps and recycle many items (e.g. glass, paper, many plastics) so they don't end up in landfills. Recycling also reduces the need to make brand new versions of the same things, which is also a way of lowering carbon emissions.

Air travel: Of all the actions listed here, travelling by plane produces the most greenhouse gases. If possible, try to travel by train, bus or boat instead (even cars are better than planes!). If you do have to fly, try not to travel in first class.

Transportation: Cars that are powered by petrol/diesel release greenhouse gases. This is the smoke-like gas you can see coming out of cars' exhaust pipes. If you can, try to carpool or use public transport instead. Cycling and walking are the best alternatives to taking the car as they don't release any greenhouse gases.

Food: Producing, processing and transporting food releases lots of greenhouse gases in different ways. Cows, for example, actually release greenhouse gas in their burps and farts and they consume huge amounts of water. If you can, try to eat less meat.

Consumption: Making, packaging and transporting the things we buy releases lots of greenhouse gases. The best thing you can do is try to buy fewer things. If you do need to buy something, try to buy it second-hand or try to make sure that what you're buying will last you a long time so you won't have to replace it again soon.

We welcome feedback and would be delighted to hear your thoughts on this activity. Feel free to send an email to schools@climatescience.org and we'll be sure to get back to you soon :)

