# COP26 Experiments for Schools.

## Use of energy

Experiment – Battery powered toys and circuits.

Use battery powered toys and circuits to demonstrate the need for energy. Use a remote-controlled car to show how it only works with a battery. If the battery is taken out, the car won’t go. This shows the need for fuel in our vehicles. Build a circuit with a battery and a light bulb. Show it working with the battery in, then not working without the battery. This shows the need for a power source for our home electricity to work.

Rather than batteries, most vehicles use petrol or diesel, and houses and other buildings (such as school) use electricity created by power stations. But the idea is the same. Without these fuels, the cars, vehicles and electrical items wouldn’t work.

### Discussion activity:

Talk about things in everyday life that use electricity or petrol. We get out of bed in the morning, and we might switch on lights, the television or the radio. We might cook breakfast, or get milk from fridge, use the kettle to make a hot drink. Maybe we used a car or a bus to get to school. Even by the time we have arrived at school we have already done many things that need electricity or fuel. None of these things are bad things. We all need these things to live our lives in a healthy, comfortable and enjoyable way.

Energy generation is an essential part of our daily lives, and one that allows our society to operate the way it does. Traditionally most of our energy came from burning fossil fuels such as coal, oil or gas. Fossil fuels take millions of years to be produced, and one they have run out there will be no more for us to use. Burning fossil fuels also releases lots of gas into our atmosphere. In recent decades scientists and engineers have been creating renewable energy sources, such as wind, solar and wave power, which don’t run out, and therefore can be used to create energy forever. These renewable energy sources also don’t release gases into the atmosphere.