



## ENERGY AND RECYCLING: Conserving Energy

Energy is everywhere and it takes many forms. Every living thing needs energy for growth, warmth and movement. But most of the work we carry out uses not only our internal energy and strength we get through food, but external energy in the form of electricity to power machines and produce heat, light and sound. The more energy we use the more we can put our environment at risk – electrical energy production and use can increase harmful carbon emissions.

Energy conservation is the process of reducing our energy usage and waste.

### Conserving electrical energy

It's important for us all to think about ways to save energy at both home and school. Here are some tips you can follow:

- Don't leave your phone charger plugged in when you're not using it. This uses a lot of energy on its own, and for no reason!
- Don't leave appliances on standby; turn them off – it saves energy and money too!
- Don't leave lights on unnecessarily and switch to energy-saving bulbs.
- Don't have windows open and the heating on at the same time; turning the thermostat down, even by one degree can make a difference to how much energy you use.
- Think about the appliances that use a lot of energy but aren't really needed, like a tumble dryer or dishwasher – do you need to use them?
- Think about your energy use - don't use the washing machine if there's only a half load, don't leave the freezer or oven doors open and don't turn the fridge up to the coldest temperature.

### Conserving heat energy

Keeping buildings insulated conserves heat energy therefore reducing wasted energy and saving money. Insulation works by trapping heat in the space between two objects.

#### Types of insulation

**Cavity walls:** In most houses built after 1920 there is a space (cavity) built into the outside wall. If this cavity is filled with insulation then heat is trapped.

**Flooring:** Sometimes heat can be lost through loose floorboards; this is why many people cover their floors with carpet.

**Roof:** Special insulation made from either natural materials such as sheep's wool or a man-made material, like fibreglass, can be placed in the loft space so that heat does not escape from the roof.

**Hot water tank cover:** Placing a special insulating jacket (called lagging) over the hot water tank will help to stop heat escaping.

**Draught proofing:** Chimneys, windows, doors and letterboxes all let air in and hot air out, so reduce this by draught proofing wherever possible.



### Did you know?

Energy-saving light bulbs last up to 12 times longer than ordinary light bulbs.