



# Ready to take the safe electricity survey?

**National Curriculum**  
This activity supports work in:

**PSHE/  
CITIZENSHIP**

**Developing a healthy, safer lifestyle:**  
3e) Recognising risks in different situations and deciding how to behave responsibly.

**Also supports work in:**

**SCIENCE**

**Breadth of study:**  
1a) A range of domestic and environmental contexts that are familiar and of interest to them.

**Also supports work in:**

**ENGLISH**

**En1 Speaking & listening, group discussion & interaction:**  
10a) Investigating, selecting, sorting.

**En3 Writing, planning & drafting:**  
2a-f) To develop their writing on paper and on screen; planning, drafting and presenting a piece of writing.

## How to use the worksheet

-  Ask different groups to survey different areas of the school and then present and share their findings.
-  Draw the children's attention to the location of electrical devices. For example: indoor and outdoor lights, lights in toilets and lights in other areas where there is water.
-  Ask the children to note the differences between lights (and other appliances) in different locations. Ask them to consider possible dangers and how these are avoided. Tell them to think about water, electric shock, damage, overheating and fires.
-  Discuss the various locations and styles of switches. Ask the children to think about how the equipment is made safe. For example: pull-cord switches and switches on the outside of a room where there is water.
-  Ask about appliances and switches that are placed out of reach, why this is and what difference it makes.
-  Encourage them to add notes to the survey sheet about how to use the devices safely.
-  Suggest that the children carry out a similar survey at home.

## Key electricity facts

-  Mains electricity is very powerful (230 volts). It can kill.
-  Electrical switches allow the current to pass through wires and power the equipment. To prevent the current passing through other materials or through people, wires are insulated with PVC sheathing.
-  Electricity can pass through water, including drips from wet hands, so you should never touch standard indoor switches or appliances unless your hands are dry. Water must be prevented from getting into electrical equipment outdoors or in other places such as bathrooms, shower rooms or toilets.
-  Some electrical equipment gets hot. Flammable items such as paper should never be left nearby.
-  We use some electrical equipment with water: kettles, hand dryers, food mixers, steam irons and cookers. These are specially designed so that no water reaches the electricity.



**Did you know?**  
An electric circuit needs an unbroken metal path. It can be broken or joined using a switch or other connection.



Take a good look around your school

Make a survey of electrical equipment at your school such as light switches, hand dryers, plugs and kettles. They might be in a hall, class or staff room, outdoors or in the canteen.

Equipment	Place	Within reach?	Is it safe?	Safety tip
Light switch	Toilets	Yes - on the wall	Yes - because it is outside the main door	Make sure you do not touch it with wet hands so you don't get an electric shock



Share your survey with others in your class or group. Choose one piece of electrical equipment and write some rules for using it safely.