



KEY QUESTIONS

- What do cells and batteries do?
- What is an electric circuit?
- Where does energy come from in a power station?
- How does electricity get from a power station to where it is needed?
- How can we use electricity safely?

2.1 Cells and batteries

Batteries come in all shapes and sizes. Batteries are needed for many different purposes. Most torches, radios, calculators, cell phones, some toys and even cars, pacemakers and hearing aids need batteries to work.



Typical batteries

New Words

- cell
- battery
- circuit
- pacemaker



Batteries are useful because they store chemical energy. When the battery is connected in an electrical appliance and the appliance is switched on, the stored energy in the battery is transferred to the appliance in the form of electrical energy to make it work.

ACTIVITY: Investigating the source of electricity in a torch.

MATERIALS :

- a working torch
- an old, broken torch

INSTRUCTIONS:

1. Turn your torch on and off. Can you see the bulb light up?
2. Turn your torch off. Open it up and take the batteries out.
3. Now turn it back on.

QUESTIONS:

1. Does the bulb light up when there are no batteries in the torch?

2. What does this tell you about the need for batteries to make your torch work?

3. Do you remember learning about transfer of energy in Gr 4? When the torch lights up, what is the chemical energy in the battery transferred to?

4. Bring an old torch to school that can be taken apart. Look carefully at all the parts that make up a torch and make a list of what you find. Each part of the torch is needed for the torch to work properly.

