



POWER DISCOVERY ZONE

KS2

FACTSHEET 9

Powerless

ENGLISH



⚡ Key Electricity Facts

- A power cut can have various causes. Wind or overhanging trees can cause overhead wires to short-circuit. Contractors digging holes sometimes damage underground cables by accident or equipment is damaged through vandalism.
- Very occasionally, an electricity company will have to cut off the supply to some areas if there is a major failure in generation or an unexpected surge in demand.
- More commonly, the power is turned off to carry out planned maintenance work that will help to prevent unexpected power cuts

? How to use this worksheet

- Ask the children what happens in a power cut and how this affects homes. They should think about how we rely on electricity for many everyday activities, and how to manage without it. One way to begin might be to list these activities.
- Ask them to think of ways of overcoming these problems. Examples include: keeping fridges and freezers closed as much as possible; having a phone available that does not need an electricity supply, i.e. a charged mobile phone or an analogue corded phone, having alternative heating sources (gas heaters, coal or wood-burning fires or stoves) and

alternative lighting sources (candles, torches, gaslights, oil lamps, battery lanterns); not leaving candles or gas heaters unattended or too close to flammable materials; making sure electrical appliances are switched off (a hot hob or electric heater could be dangerous if it switches on unexpectedly when a flammable item is near); leaving a light switched on to alert when the power returns; switching off computers and other sensitive equipment to avoid damage from surges when power is restored, using a corded phone or a charged mobile phone to access the power company's website.



Exercise Extension: The lesson could be started with the lights suddenly going out and the teacher acting out there has been a power cut. Prepare the room before the activity by lowering the blinds. The teacher could then ask the children what has happened and why and if any children have experienced it at home? If so, what did they do and the dangers.

National Curriculum supporting information

ENGLISH

En3 Writing:
2a-b) Planning and drafting

Breadth of study:
9d) to review and comment on what has been read, seen or heard, focusing on both the topic and the writer's view of it

PSHE/CITIZENSHIP

Developing a healthy safer lifestyle:
3e) to recognise the different risks in different situations and then decide how to behave responsibly

3g) rules about health and safety, basic emergency aid procedures

Breadth of opportunity:
5h) find information and advice



Related Material

www.youtube.com/watch?v=41O-ydl_TQ8



During a power cut it can be difficult to manage without electricity. Can you advise people?

Collect ideas for an instruction leaflet to advise people how to manage without electricity and how to be ready for when it is switched back on. Write on the notepads below. Then write your leaflet.

Fridges and freezers

Notepad with 15 horizontal lines for writing.

Phones

Notepad with 15 horizontal lines for writing.

Lighting

Notepad with 15 horizontal lines for writing.

Keeping warm

Notepad with 15 horizontal lines for writing.

How you will know when the electricity is back on

Notepad with 15 horizontal lines for writing.

Keeping computers and other equipment safe when the electricity suddenly comes back

Notepad with 15 horizontal lines for writing.

Now try this!

- Highlight anything that might be dangerous during or after a power cut.
- Add a 'Stay safe' instruction box to your leaflet.

