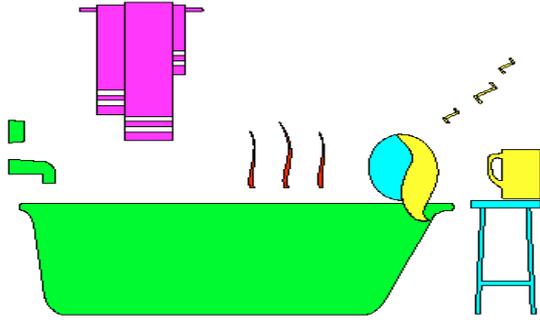


# Using IT in... electricity

## Which room has the most things that use electricity?

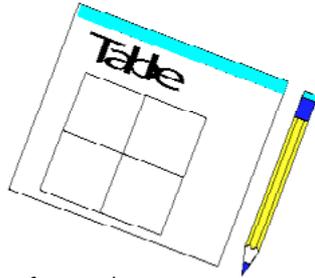
The children can do a survey of the things that use electricity as a nice topic starting activity. They put their findings in a **spreadsheet** table and draw a bar graph of their results. In the graph each bar shows the number of appliances



in a room. They can look at the graph to find out which room has the most appliances: are the rooms with the most things the most used?

## How important is electricity to us?

Get the children to record the things that they would have to stop doing if there was a power cut. They can say what they would use if say, the lights went out. They can list all these in a tidy **word processor** table.



You might get the children to write a newspaper story about the day there was a power cut. Again, they can use the word processor and go on to present the story, with a picture, in a newspaper layout.

IT: Communicating

## How does it work?



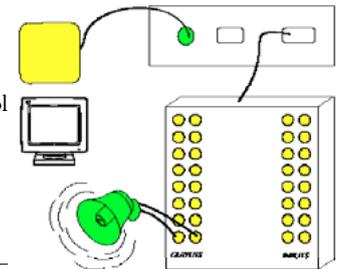
Using the Internet you can find out about the appliances and machines we use daily. It's easy to do a project about the refrigerator, how it works, who invented it and so on.

IT: Modelling

## Invent something

**Control technology** allows children to design systems that work automatically. It is enthralling and gives them an insight into how things work. They could design and build a robot, a buggy, a washing machine, car park barrier, pelican crossing or railway crossing. They can use glue, card, wood, wires, bulbs, motors, switches and sensors. And you can intervene, asking them to explain their designs, or say how what they could make it better and so on. Electricity is a good topic for control projects as the children can exercise their understanding of circuits.

IT: Control



## How can we save money on electricity?

You can point children to the 'rating plate' found at the back of many electrical appliances which shows how much power is used. They can carefully collect the power figures from various appliances. They can also record approximately how long each appliance is used for daily. Then, using a **spreadsheet** program, you set up a special recording table. The children enter their figures into the table and it will calculate how much each item costs to run. You might ask: which appliances use the most power? Which are used for the longest time? Which costs the most to run each day? How much does it cost to run the whole house for a day? Some children will be able to see how changing values in the table also changes the electricity bill. By doing this they can answer the question: how much money can we save by switching off the lights?

IT: Modelling