

Electricity

What is electricity?

Electricity is a form of energy that flows from one place to another. This is called current electricity.



Many things that we use every day run on electricity. Toasters, hair dryers, lights, radios, cars, trains, and many more, rely on electricity to work properly.

How is electricity made?

Source	Facts
Oil and coal	Oil and coal will run out one day. Burning these fuels causes pollution to the world, which harms people and animals.
Wind and sun power	The wind and sun will not run out. Using them causes a lot less pollution.

Where is electricity made?

It is made in power stations, wind turbines, some batteries and solar panels. It is then stored and carried along wires to where it needs to be used, like in homes, hospitals and factories.

Facts:

- The first electric motor was invented in 1821 by Michael Faraday.
- Electricity is measured in volts.
- It is stored in huge grids and then flows throughout the country to different places.
- It can be very dangerous as you can get an electric shock from it. You need to be sensible around electrical things.
- Electricity flows better through wires made from silver, gold and copper.

Questions

1. How would you describe electricity?

2. Name three things that use electricity to work.

3. Which way of making electricity do you think is better, and why?

4. How does electricity get from where it is made to where it is needed?

5. Who invented the first electric motor?

6. Where is electricity stored?

7. Which fact do you find most interesting, and why?

Problem Solving with Bar Models

Use bar models to solve these word problems.

There are 20 sweets in my bag and 13 sweets in my friend's bag. How many sweets have we got altogether?

20	

In three rolls of the dice, Jack scored 18. James scored 9. How many more did Jack score than James?

9	

There were 30 biscuits in the tin. Now there are 25. How many have been eaten?

25	

I had 46 beads. I used some of them to make a bracelet and now I have 20 left. How many beads are on my bracelet?

20	

4 months of the year have 30 days. How many months do not have 30 days?

Sam took 25 minutes to do his homework. It took Jacob 22 minutes. How long did they take altogether?

Billy gave 25 of his football cards to Ali. Now he has 34 left. How many did he start with?

My dog weighs 5kg. My friend's dog weighs 12kg. How much heavier is my friend's dog?
