EMPIRIBOX

Primary School Science

Empiribox is dedicated to science and improving the science education in primary schools.

In this investigation, children will light up a bulb using just tin foil and a battery.

Spectacular Science

Circuits

EMPIRIBOX
Primary School Science

Battery power

Electrical circuits can be very complicated and extensive, even the ones in our homes. But they don't always have to be, and you can generate electricity and transport energy using everyday household materials.

Given just a bare bulb and battery, plus strips of foil, can the children make the bulb light up?

Some materials help to carry electricity, like aluminium foil and others are not, like wood. These materials are called **conductors** and **insulators**.

What you will need

1 x AA Battery

1 x small bulb (1-3.5V)

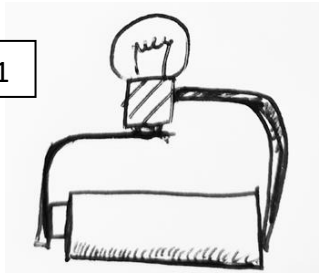
Strips of aluminium foil

Activity – light up the bulb

How to do it

There's two ways.

1



2

1. Use two pieces of tin foil. One on each end of the battery. Touch one to the bottom of the bulb and one to the side.

2. The other method uses just one piece of foil. Stand the bulb on the end of the battery so the bottom of the bulb is touching the terminal. Run a piece of tin foil from the very bottom of the battery and touch the side of the bulb. (You can also do this with the side of the bulb touching the terminal, and the foil touching the bottom of the bulb).

Safety

Don't hold connect the two ends of the battery with tin foil for too long, it will get hot.
Take care with bulbs, they can break.