

Starters for Science are 4 activities that parents can use at home to help children develop their science alongside the key learning and vocabulary children are using at school. The activities are easy to resource and provide children with the stimulus to learn and talk about their science topic. Encourage children to use the correct vocabulary as they talk about what they are doing and finding out. Don't forget to share your work on social media

## #ScienceFromHome

### Key Learning:

Lots of common appliance run on electricity. This may be from a battery, that is within a device or appliance, or the device may need to be plugged into an electrical socket for it to work.

For a bulb to light, there needs to be a complete circuit, including a cell (battery), wires and a bulb. If a switch is open or a wire not connected, then the bulb will not light.

Some materials do not allow electricity to pass through them. These materials are known as electrical insulators. Other materials allow electricity to pass through them; electrical conductors.

Many metals are good conductors of electricity. Many plastics are good insulators.

Cables and plugs are often coated in materials that don't conduct electric current. Inside they have copper wires, that are good conductors.

### Vocabulary:

electricity

circuit

switch

cell

battery

plug

mains

appliance

device

wire

bulb

current,

conductor

insulator

### Will the bulb light up?

Draw a picture of a simple circuit, using a cell (battery), three wires, a switch and a bulb. Will this bulb light up? Can you say why? Draw a picture of circuit in which the bulb will not light up and say why. Can you draw any different circuit diagrams and predict if the bulb will light?

<https://bbc.in/313Xlwl>

### Excellent electricity

Make a list using words/ drawing to find all the things in your home that use electricity. If you could keep only one item which would it be?

[www.stem.org.uk/rxxxr](http://www.stem.org.uk/rxxxr)

### Make an electric circuit

Using items you have at home can you make a model of an electrical circuit? What could you use for the wires, cell (battery) or buzzer? Can you add a switch? How would your switch be open or closed?

### Will it conduct electricity?

Some materials allow electricity to pass through them (electrical conductors), and some don't (electrical insulators). Find 8 items made of different materials around the house. Can you sort them into those that you think will conduct electricity and those that won't. Research which materials conduct electricity.

<https://bbc.in/2NgJniE>