

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:

The brightness of a bulb or the volume of a buzzer in a circuit depends on the number of cells (batteries) and their associated voltage.

The more voltage available for the components in a circuit the brighter or louder they will be.

Switches control whether a circuit is on or off. You can control different elements of a circuit with switches.

Universal electrical symbols are used the world over and are recognised as efficient ways of drawing an electrical circuit.

The components of an electrical circuit are:

cell, battery (more than one cell)

motor

wire

bulb

buzzer

switch

### Vocabulary:

electricity

simple circuit

light bulb

cell

wire

buzzer

switch

motor

battery

series circuit

conductor

insulator

voltage

components

symbols

circuit diagram

### Draw a circuit

On a piece of paper draw out a simple circuit using the correct symbols. Add in a mistake that won't allow the circuit to work.

Can someone else spot what is wrong and correct it?

[www.bbc.co.uk/bitesize](http://www.bbc.co.uk/bitesize)

### Which came first?

Have a look around your house for anything that is powered by electricity. It could be either mains or battery powered. Which do you think was invented first? Can you order the items which you think were invented first to those invented later? Can you do some research to find out which was the first invented? Are there any that surprise you? Do they look very different now to when they were first invented?

[www.ogdentrust.com](http://www.ogdentrust.com)

### Symbol game

Draw all the electricity symbols on different pieces of paper or post it notes. Turn them over and choose one without looking and hold onto your forehead. You then need to ask other people questions to work out what symbol you are. Ask questions such as: Can I spin?

### Static electricity

Tear up paper into small pieces and put on a table. Blow up a balloon and rub it approximately 10 times back and forth on either your hair or a piece of clothing, a jumper works really well. Now hold the balloon over the paper, can you pick it up? Try placing your charged balloon next to a tap that is turned on, do you notice anything? <https://www.stem.org.uk/rxvyr>