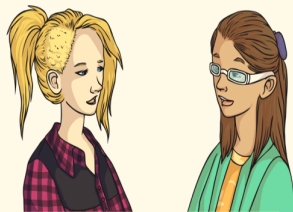


WALT: conduct an investigation.

Science

Electricity

WALT: conduct an investigation.



Aim

- I can plan an investigation.
- I can understand variations in how components function.

Success Criteria

- I can select an appropriate scientific enquiry.
- I can plan an investigation in detail.
- I can decide which variables to control.
- I can explain variations in functions.

Wire Length



Would additional components in a circuit affect the power of it?

Discuss this question with your talk partner and predict:

- What difference will it make?
- Why would it make a difference?



Planning Your Investigation Making Your Test Fair

In order to make sure that you carry out a fair test, which means that your results are accurate and can be trusted, then you need to be clear about your:

- **independent variable** (what you will change and compare)
- **dependent variable** (what you will measure – there should only be one dependent variable)
- **controlled variables** (these are aspects of the investigation you will keep the same so that they don't affect your results because you end up measuring their effect).

Investigation



Question:

Would additional components in a circuit affect the power?

Prediction:

I predict that the more components, the less power they will have.

Independent Variable:

I am going to change the amount of components.

Dependent Variable:

This will effect the power of the components.

Controlled Variable:

I am going to keep the same amount of cells, wires and type of component.

Investigation



Equipment:

The equipment that I need is:

- *3 bulbs/3 buzzers/3 motors
- *Cell and cell holder
- *Wires

Method:

- 1) Gather equipment and check it is all in working order.
- 2) Create a circuit using one component and measure the power of it.
- 3) Repeat this using additional components and measure the power of the components.

WALT: conduct an investigation.

Science

We are just planning today!

Use the video and have a look at the different equipment used to plan the beginning of your investigation.

We are not carrying out the investigation in this lesson!
We will do this in our follow up lesson later in the week!

