

L.O To understand and explain the effects of making changes to a circuit (using computer simulations of circuits)

HOM: Thinking and Communicating with Clarity and Precision

What did you learn about the dangers of electricity in our last lesson?

Today we will be using some online simulations of circuits today to investigate what happens when we make different changes to a circuit. You will need to watch these links first:

<https://www.bbc.co.uk/bitesize/topics/zq99q6f/articles/zt8vg82>

<https://www.bbc.co.uk/programmes/p01ckn5d>

<https://www.bbc.co.uk/programmes/p0119dbm>

now try this link: <https://www.andythelwell.com/blobz/guide.html>



Click on this icon to change circuits

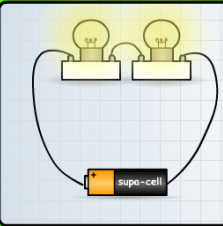
The Blobz Guide to Electric Circuits

andythelwell.com/blobz/guide.html

Changing circuits

Light all 5 stars for the bonus!

Help



You can change circuits by adding more bulbs, or adding more **cells**.

If you add more bulbs to a circuit, the bulbs will glow less brightly (dimmer), because the bulbs have to share the electricity that the **cell** provides.

Next

Use this section to find out about ways to change circuits. Click the "Next" and "Back" controls to move through the different pages of info. Click on the **green arrow** at the bottom to try out the activity!

Options in Section 4:

the blobz guide to **ELECTRIC CIRCUITS**

Click the arrow to start

The Blobz Guide to Electric Circuits


andythelwell.com/blobz/guide.html

Changing circuits


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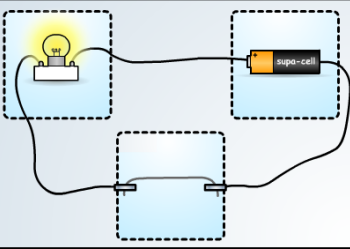
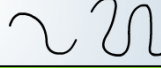
Cells



Bulbs



Wire



Make changes to the circuit by changing the number of bulbs and cells, and the length of the **resistance** wire. Add items by **dragging and dropping** them into the circuit.

Remember to **only change one thing at a time** to make it a **fair test**!

Options in Section 4:

the blobz guide to **ELECTRIC CIRCUITS**

Follow the instructions on the screen.

Draw one of the circuits you created. How many bulbs did you use? How many cells? Was the wire long or short? Did the bulb light? Was it bright or dim?

Can you explain what you could see happening to the brightness of the bulb?

Circuit

Explanation:

Revision : complete the activities in these links:

<https://www.bbc.co.uk/bitesize/topics/zq99q6f/articles/zt8vg82>

<https://www.bbc.co.uk/bitesize/topics/zq99q6f/articles/zs7g4j6>

