

Checking Circuits

1



For a circuit to work a complete unbroken circuit is needed.

Create a simple circuit for a partner using:

- Cell
- Wires
- Switch
- Bulb or Motor

Does your circuit work?

Yes! Congratulations, you have complete circuit.

Make a break in the circuit.

Now pass it to your partner. Can they fix the problem and complete the circuit?

Bulb Brightness

2



How can I make my bulb brighter or motor turn faster?

Create a simple circuit using:

- Cell
- Wires
- Switch
- Appliance: Bulb or Motor

Can you make the bulb brighter?

Can you make the motor turn faster?

What effect does adding more wires, switches or cells to your circuit have?

Take a close look at your appliance.

How much power does it need to function?

Overloaded Circuits

3



What happens if I add more bulbs to my circuit?

Create a simple circuit using:

- Cells
- Wires
- Switch
- Bulb

Investigate ways of adding more bulbs to your circuit.

What do you notice?

Continue adding bulbs to your circuit.

Can you explain what is happening here?

Constructing Circuits

4



I like a challenge... but are my switch building skills up to it?

Create a simple circuit using:

- Cell
- Wires
- Bulb
- Switch made from some or all of the following:
 - paper clips
 - drawing pins
 - balsa wood, cardboard or card
 - silver foil
 - crocodile clips

Can you switch the light bulb on and off?