
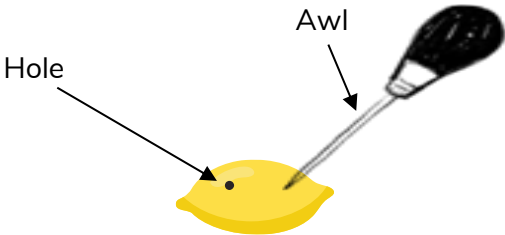
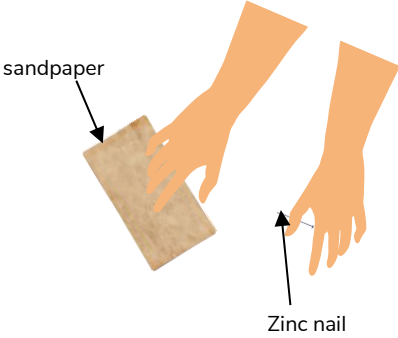
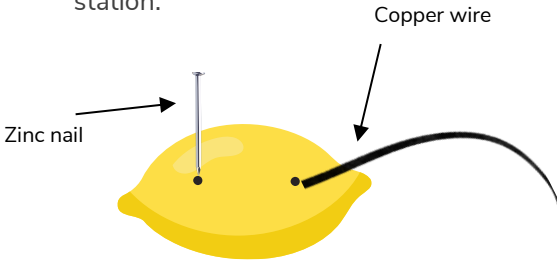


# Fruit and veg power challenge instructions

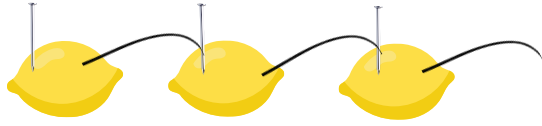


## Resources list

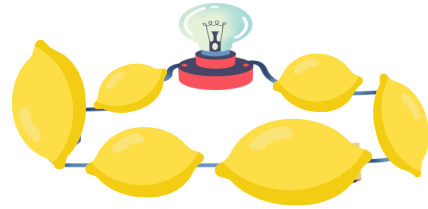
- 6 pieces or 6 small whole fruit or vegetable (apple, orange, lemon, potato, onion and courgette)
- 4 zinc coated nails (galvanised)
- 4 short pieces of copper wire
- 8 connecting wires with crocodile clips
- 1 small LED light, buzzer, or digital clock ( $\leq 2V$ )
- 1 multimeter (optional)
- Paper towels
- Safety goggles and disposable gloves (optional)
- Pen/pencil

<p>1. Roll each fruit/veg gently on the table to soften it slightly.</p> 	<p>2. Make two small holes about 2–3 cm apart using a small screwdriver.</p> 
<p>3. Use sandpaper to clean your nails by rubbing the sand paper on the nails. This will improve the conductivity.</p> 	<p>4. Push a zinc nail into one hole and a copper wire into the other hole. Make sure the metals don't touch inside the fruit. Repeat this for all the fruits and vegetables on your station.</p> 

5. Connect the copper wire of one fruit/veg →to the zinc nail of the next fruit/veg. Continue until all fruits/veg are linked.



6. Connect the end of the chain of fruits to the LED light or buzzer.



7. If you have a multimeter connect it to the circuit as shown.

