



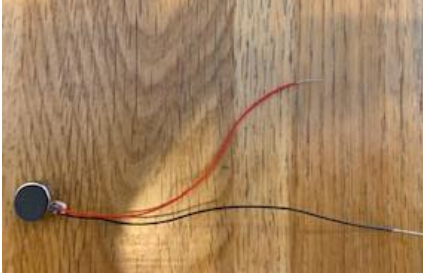


## Circuits – Making A Dancing Monster


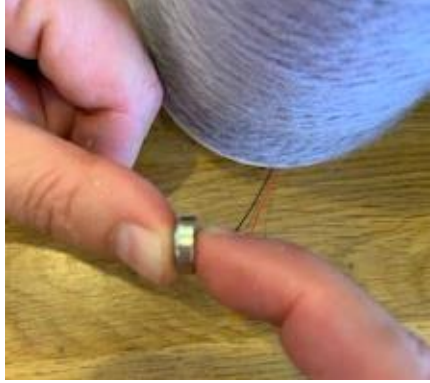

This activity allows participants to explore the positives and negatives of a battery and is a basic introduction to circuits. The majority of the time in this exercise is taken up by decorating the paper cup (a craft exercise).

You will need the below per child:

- 1 paper cup
- PVA glue
- Craft items to decorate the cup
- 1 mobile phone vibration motor
- 1 low voltage battery ideally a watch battery although a pencil battery will work
- 3 tooth picks
- Sellotape

1	<b>Let's start simple.</b> Use the craft items available to create your monster. Make sure nothing will fall off because eventually the monster will move.	
2	Allow the monster to dry (it doesn't have to be totally dry and it is important to keep the attention of the participant).	

<p>3</p>	<p><b>Mobile phone vibration motor.</b> The motor (sliver bit) has an adhesive strip on it which will be removed soon and attached to the inside of the paper cup.</p> <p>There is a red wire, which is positive, and a black wire, which is negative. This is important for later. It is the same in all electronics including jumping a car!!</p> <p>We have bought the mobile phone vibrators from Amazon here <a href="#">&gt;&gt;</a>. They are about 80p each.</p>	
<p>4</p>	<p><b>Attaching the vibration motor to the cup.</b> This particular motor has a sticky strip, remove the strip and attach the motor to the bottom inside of the cup, when it is turned upside down.</p> <p>You will need to easily access both wires from the bottom of the cup so make sure it is attached low down.</p>	
<p>5</p>	<p><b>Additional activity.</b> You can add short legs by attaching cocktail sticks with Sellotape. This will make your monster move better but it is not necessary.</p>	

<p>6</p>	<p><b>Making it move.</b> Place the monster on the table with the wires visible.</p> <p>Using your battery, make sure you know what side is the positive side and what side is the negative side (look for the + and – sign on the battery itself).</p>	
<p>7</p>	<p><b>Last step.</b> Squeeze the wires to the battery and the monster should vibrate and move.</p>	 <p>or</p> 

Additional year 4 electricity worksheets are available on Twinkl to expand the exercise.