

Science Club: Electricity

This week we did experiments with electricity.

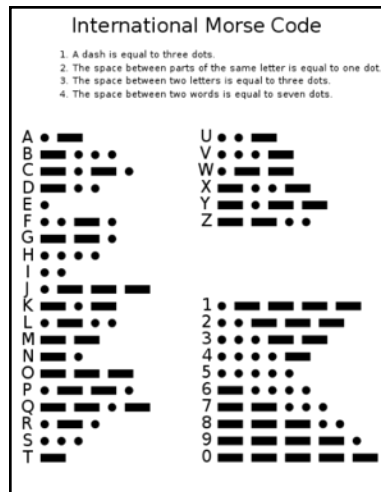
If you want to repeat the activities at home, leave the circuit parts secured with duct tape (grey tape). The red and yellow wire ends can be freed by untucking and unclipping them. Make sure the bulb is not lit when you store your circuit.

We first looked closely at a bulb to see the filament, then wired it to a battery to make it light.

To repeat at home: start with the red and yellow wires having free ends, covered in foil (for better contact). Touch the ends together to complete a circle of wires that include the battery and the bulb.

We used our circuit to test different materials to see if they could conduct electricity. At home, make sure there are foil blobs on the ends of the red and yellow wires, then touch them to each end of the object you want to test.

You can also use this circuit to send morse code signals: see the code to the right.



Lastly, we made a game.

To set up: tuck the free end of the red wire under the foil at the base of the copper wire. Clip the wire loop to the foil of the yellow wire. The challenge is to pass the loop along the whole copper wire without turning the bulb on. If your hand shakes, the metal loop touches the copper wire, completes the circuit, and makes the bulb light. If your game stops working well, try sanding the tarnish off the copper and brass wires.

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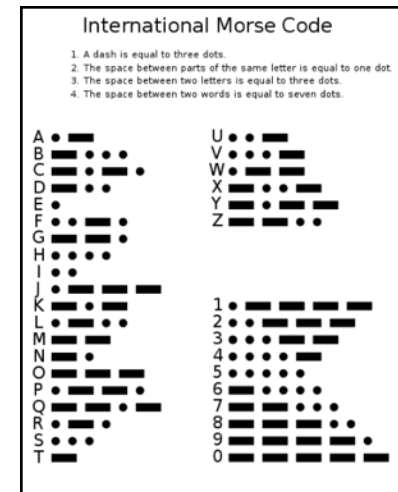
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