

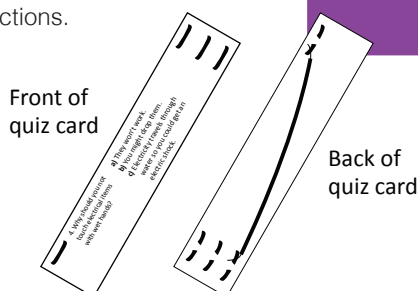
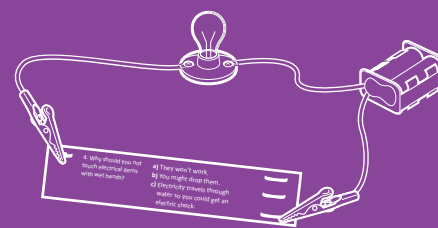


### ? How to use this worksheet

- Ask the children to work with a partner to answer the questions. They can all share their answers with their group. Discuss any discrepancies and, if necessary, explain the answers.
- Children can then create a quiz game using their correct answers and the circuit they made for worksheet 9: Puzzle hub. As shown below, they will need to: cut out each question-and-answer section from the Safety quiz worksheet; stick it to a piece of thin card; and punch a metal staple on top of the short line next to the question and the short line next to each of the three answers. Make sure the staples for the answers do not touch one another. (NB: for this to work, you need staples for the wrong answers as well as the right ones. Otherwise the children will know the answers simply by looking to see if there is a staple next to them).
- On the back of each card, cover the staples for the wrong answers with sticky tape then thread the ends of lengths of wire taken from the puzzle hub through the back of each question staple and correct answer staple to link them. You will probably need to cut the wires down and bare the ends of the cut sections.
- In pairs, one child puts a crocodile clip from their circuit on top of the paper clip next to one of the questions and reads it out. When the other child has answered they put the other crocodile clip on top of the staple next to the child's answer. If the child has answered the question correctly, a complete circuit is created and the bulb will light.

### ⚡ Key Electricity Facts

- The correct answers are: 1 a), 2 c), 3 a), 4 c), 5 a), 6 b), 7 c).
- An electric circuit needs an unbroken metal path. It can be broken or joined using a switch or other connection.



Exercise Extension: The children could extend the game by adding extra questions and answers.

## National Curriculum supporting information

### PSHE/CITIZENSHIP

#### Developing a healthy, safer lifestyle:

3e) to recognise the different risks in different situations and then decide how to behave responsibly

### SCIENCE

#### Sc4 Physical processes, Electricity:

1a) to construct circuits, incorporating a battery or power supply and a range of switches, to make electrical devices work

### ENGLISH

#### En1 Speaking & listening, Group discussion & interaction:

3a) making contributions relevant to the topic



### Related Material

[www.switchedonkids.org.uk/fun-and-learning/electricity-quiz](http://www.switchedonkids.org.uk/fun-and-learning/electricity-quiz)



Work with a group to find a good place for fun and games.

<p><input type="checkbox"/> 1. What is dangerous about having electrical cables trailing across the cooker?</p>	<p>a) The plastic coating could melt, leaving bare wires. <input type="checkbox"/></p> <p>b) Nothing. <input type="checkbox"/></p> <p>c) They make the kitchen look untidy. <input type="checkbox"/></p>	<p>Answer</p> <input type="text"/>
<p><input type="checkbox"/> 2. What should you do first if someone touches a socket and receives an electric shock.</p>	<p>a) Pull them away from the socket. <input type="checkbox"/></p> <p>b) Call an ambulance. <input type="checkbox"/></p> <p>c) Turn off the electricity at the mains. <input type="checkbox"/></p>	<p>Answer</p> <input type="text"/>
<p><input type="checkbox"/> 3. How can a frayed electric flex on an iron be dangerous?</p>	<p>a) You might get a shock by touching the frayed part, or wires might touch and cause a fire. <input type="checkbox"/></p> <p>b) It could scratch your clothes. <input type="checkbox"/></p> <p>c) It isn't dangerous. <input type="checkbox"/></p>	<p>Answer</p> <input type="text"/>
<p><input type="checkbox"/> 4. Why should you not touch electrical items with wet hands?</p>	<p>a) They won't work. <input type="checkbox"/></p> <p>b) You might drop them. <input type="checkbox"/></p> <p>c) Electricity travels through water so you could get an electric shock. <input type="checkbox"/></p>	<p>Answer</p> <input type="text"/>
<p><input type="checkbox"/> 5. Why should you unwind an extension lead fully if you only need to use a short length?</p>	<p>a) The coiled part could get hot and burn through the plastic coating. <input type="checkbox"/></p> <p>b) To see how long it is. <input type="checkbox"/></p> <p>c) In case you need a longer lead later <input type="checkbox"/></p>	<p>Answer</p> <input type="text"/>
<p><input type="checkbox"/> 6. What is wrong with using a fuse that is too strong for an electrical appliance?</p>	<p>a) Nothing. <input type="checkbox"/></p> <p>b) If there is a fault, a wire in the electrical appliance could burn instead of the fuse breaking the circuit. <input type="checkbox"/></p> <p>c) It isn't dangerous. <input type="checkbox"/></p>	<p>Answer</p> <input type="text"/>
<p><input type="checkbox"/> 7. If you want to plug four plugs into one double socket what should you do?</p>	<p>a) Use a double adapter in each socket. <input type="checkbox"/></p> <p>b) Take the plugs off and twist the wires of the leads together to use two plugs instead of four. <input type="checkbox"/></p> <p>c) Use an extension lead with a bank of sockets. <input type="checkbox"/></p>	<p>Answer</p> <input type="text"/>



**Now try  
this!**

Choose one question and answer. Find out more about this particular danger.