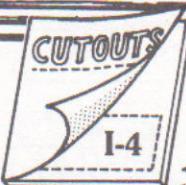


# ELECTRO-SQUARES

- 1 Find the paper called ELECTRO-SQUARES. Cut out each square along the dashed lines.



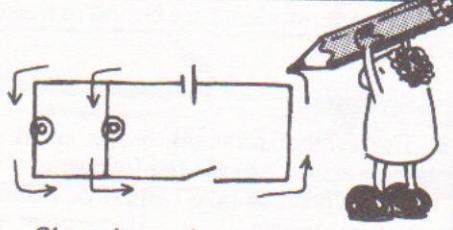
- 2 For each letter below:



Map the circuit with your ELECTRO-SQUARES.



Draw the circuit.



Show how electrons flow through the circuit.

- |                                |   |  |   |  |   |
|--------------------------------|---|--|---|--|---|
| a. 1 cell + 1 bulb + 1 switch: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow | b. 3 cells in series with 1 bulb + 1 switch: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow | c. 3 bulbs in parallel with 1 cell + 1 switch: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow |
|--------------------------------|---|--|---|--|---|

- |  |   |   |   |  |   |
|--|---|---|---|--|---|
| d. 2 cells in series + 2 bulbs in series + 1 switch: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow | e. 2 cells in parallel + 2 bulbs in parallel: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow | f. 1 bulb + 1 switch } in parallel with 1 bulb + 1 switch } 2 cells in series: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow |
|--|---|---|---|--|---|

- |  |   |  |   |  |   |
|--|---|--|---|--|---|
| g. 1 cell<br>1 bulb<br>1 switch } in parallel: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow | h. 2 cells in opposition<br>1 cell + 1 bulb<br>1 switch + 1 bulb<br>1 switch + 1 bulb } in parallel: | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow |  | <input type="checkbox"/> Map<br><input type="checkbox"/> Draw<br><input type="checkbox"/> Show flow |
|--|---|--|---|--|---|

- 3 Paper clip your ELECTRO-SQUARES into one pile. You'll need to use them again.

