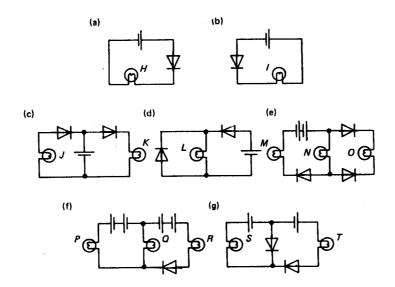
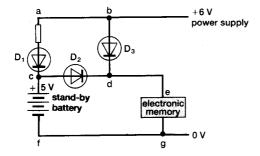
The Diode

- 1. Is the resistance of a diode large or small:
 - (a) when the diode is in the forward direction,
 - (b) when the diode is in the reverse direction.
- 2. The following circuits show cells, diodes and lamps. (NB old symbols used for the lamp and diode). For each lamp, H to T, say whether they are on or off.



3. The diagram below shows a circuit which can switch in if the main supply fails. The 6V is the main supply, and the 5V is the stand-by supply.



- (a) Use letters to answer
- (i) Which route does the current flow if the main supply works.
- (ii) When the battery is not in use, it gets continually charged up by the main supply. Which route does the current flow to "trickle charge" the battery.
- (iii) Which route does the current take if the main supply fails.
- (b) Suggest a use for this circuit.