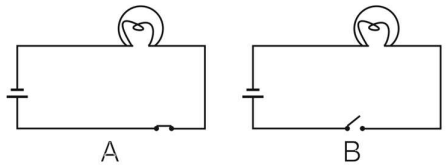
1. Make the symbols for :

   Electric cell, electric bulb, switch in on position, switch in off position, battery, wire.

2. Define: Circuit, battery, current, element (in this context)

3. Look at the two circuits. In which case will the bulb glow? Why?



4. How does a bulb glow? Explain.

5. What do you mean by a 'fused' bulb?

6. Can a fused bulb glow? Why or why not?

7.` Why does a glowing bulb become warm?

8. Name the wire used for -

   (a) glowing part of bulb (b) used to study heating effect of current

   (c) coil of wire in a heater

9. Why is element made of a special wire? Why can't we use ordinary wires in heater?

10. List the factors on which the amount of heat produced in a wire depends.

11. What are CFL bulbs? Why are CFL's replacing ordinary bulbs?.

12. What are electric fuses? How are the made? Why are they used?

13. Why are fuses inserted in all electric circuits?

14. How does fuse work as a safety device?

15. Recognise all appliances shown in pics in the NCERT book.

16. What causes excessive current to flow in electric circuits?

17. What is a short circuit?

18. Explain how MCBs work. Write the full form of MCB.

19. Why does the needle of a compass get deflected when current flows in a nearby wire?

22. Why is there sometimes excessive currents in electrical circuits?

23. What are the advantages of heating effect of electric current?

24. What is an ISI mark?

25. In which direction does the needle of a magnetic compass point? Why?

26. When does the needle of a compass show deflection?

27. What is a magnetic field?

28. What was the contribution of Hans Christan Oersted helpful in the study of effects of electric current?

29. How can we use electric current to make a magnet?

30. What precautions should be taken while making an electromagnet?
31. How would you convert an iron nail into a magnet?
32. How will you test whether the iron nail has become a magnet?
33. What happens when we stop the flow of current through the coil that is wrapped around the non nail in an electromagnet?
34. Describe the use of electromagnets in lifting loads.
35. What is the function of the electromagnet in an electric bell?
36. List all the uses of electromagnets.
37. Draw a labelled diagram of an electric bell. Which part of the bell acts as an electromagnet?
38. Describe the working of an electric bell.
39. In an electric circuit current flows from _____ to _____ terminal.
40. Diagrammatically distinguish between a closed circuit and an open circuit.
41. Name a device that changes electric energy into:

    (a) light energy (b) heat energy (c) Magnetic field
42. What is the shape of magnet used in electric bell?
43. What does the strength of electromagnet depend upon?
44. What is a solenoid?

45]. Name the scientist who discovered the magnetic effect of electric current & how?

46. What is the use of an electromagnet over a permanent magnet?
47. How can the strength of electromagnet be ινχρεασεd?