

3. Choose the most appropriate answer.

(c) The number of nuclei present in a zygote is

(i) none

(ii) one

(iii) two

(iv) four

(a) Internal fertilisation occurs

(i) in female body.

(ii) outside female body.

(iii) in male body.

(iv) outside male body.

(b) A tadpole develops into an adult frog by the process of

(i) fertilisation (ii) metamorphosis (iii) embedding (iv) budding

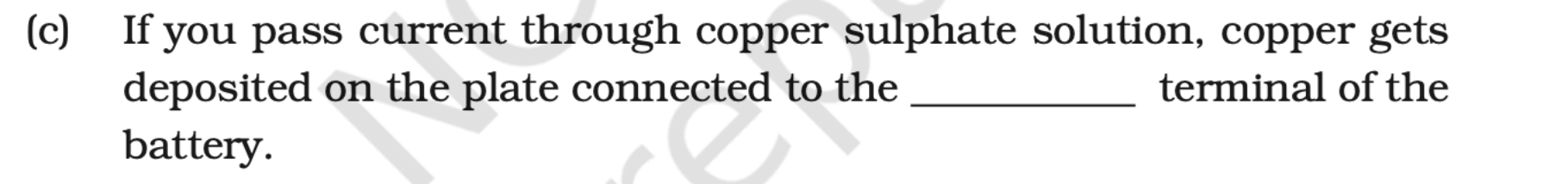
4. Indicate whether the following statements are True (T) or False (F).

- (f) Amoeba reproduces by budding. ()
- (g) Fertilisation is necessary even in asexual reproduction. ()
- (h) Binary fission is a method of asexual reproduction. ()
- (i) A zygote is formed as a result of fertilisation. ()
- (j) An embryo is made up of a single cell. ()

1. Fill in the blanks.

(a) Friction opposes the _____ between the surfaces in contact with each other.

(b) Friction depends on the _____ of surfaces.



(c) If you pass current through copper sulphate solution, copper gets deposited on the plate connected to the _____ terminal of the battery.

(d) The process of depositing a layer of any desired metal on another material by means of electricity is called _____.

3. Name three liquids, which when tested in the manner shown in Fig.11.9, may cause the magnetic needle to deflect.

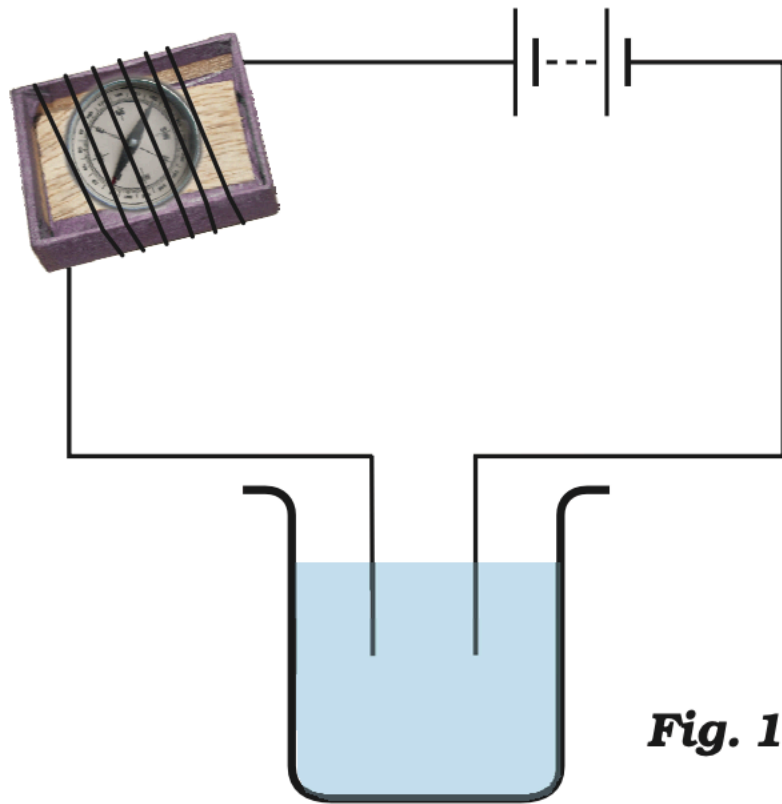


Fig. 11.9

2. Four children were asked to arrange forces due to rolling, static and sliding frictions in a **decreasing order**. Their arrangements are given below. Choose the correct arrangement.

- (a) rolling, static, sliding
- (b) rolling, sliding, static
- (c) static, sliding, rolling
- (d) sliding, static, rolling

8. Explain why sliding friction is less than static friction.

6. Does pure water conduct electricity? If not, what can we do to make it conducting?

6. Explain why sportsmen use shoes with spikes.

23. Observe the figure given as Fig. 9.2 and answer the questions that follow.

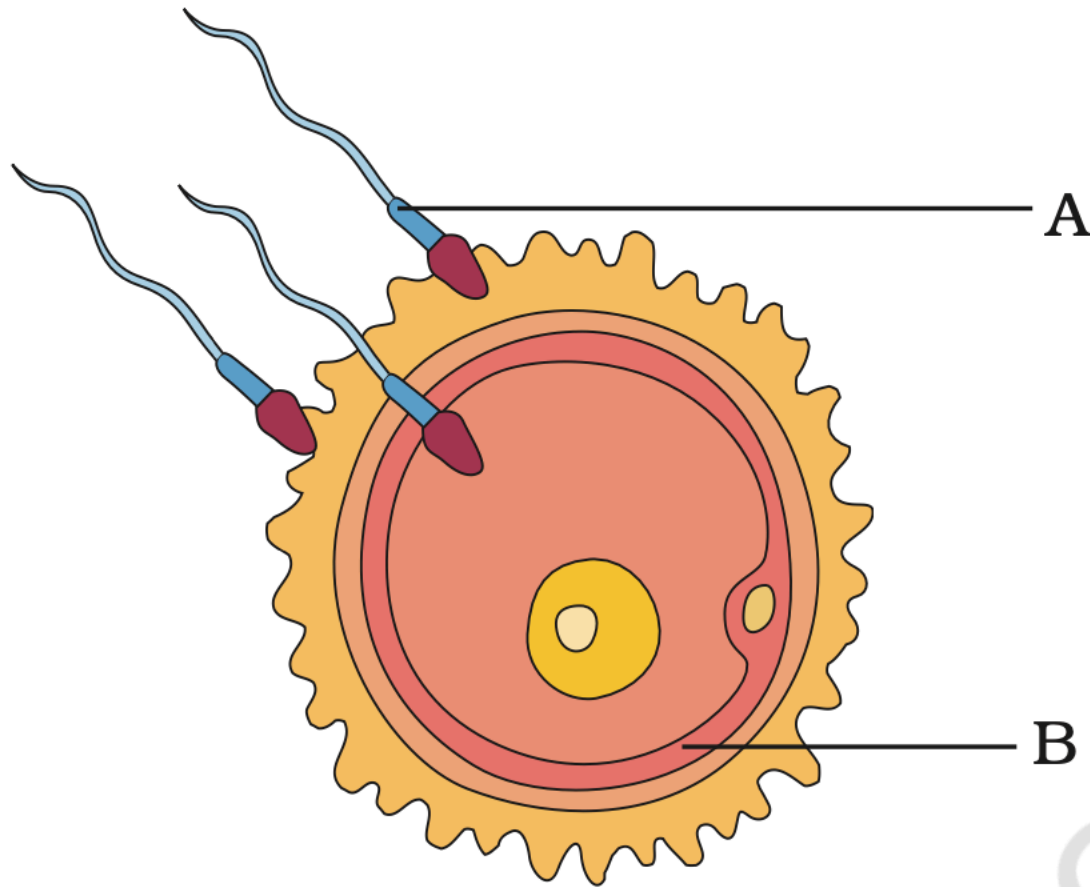


Fig. 9.2

- (a) Label A and B.
- (b) Identify the process.
- (c) What happens during this process and what is formed?

20. State whether the following statements are **True** or **False**. If false, correct the statement:

- (a) External fertilisation can occur both in water and on land.
- (b) The eggs of fish are covered by hard shells for protection.
- (c) Human egg has a head, middle piece and tail.

25. Two friends are trying to push a heavy load as shown in Fig. 12.5. Suggest a way which will make this task easier for them.



23. Observing that the bulb does not glow in the circuit shown in Fig. 14.11 A, Boojho changed the circuit as shown in Fig 14.11 B. He observed deflection in the magnetic compass.

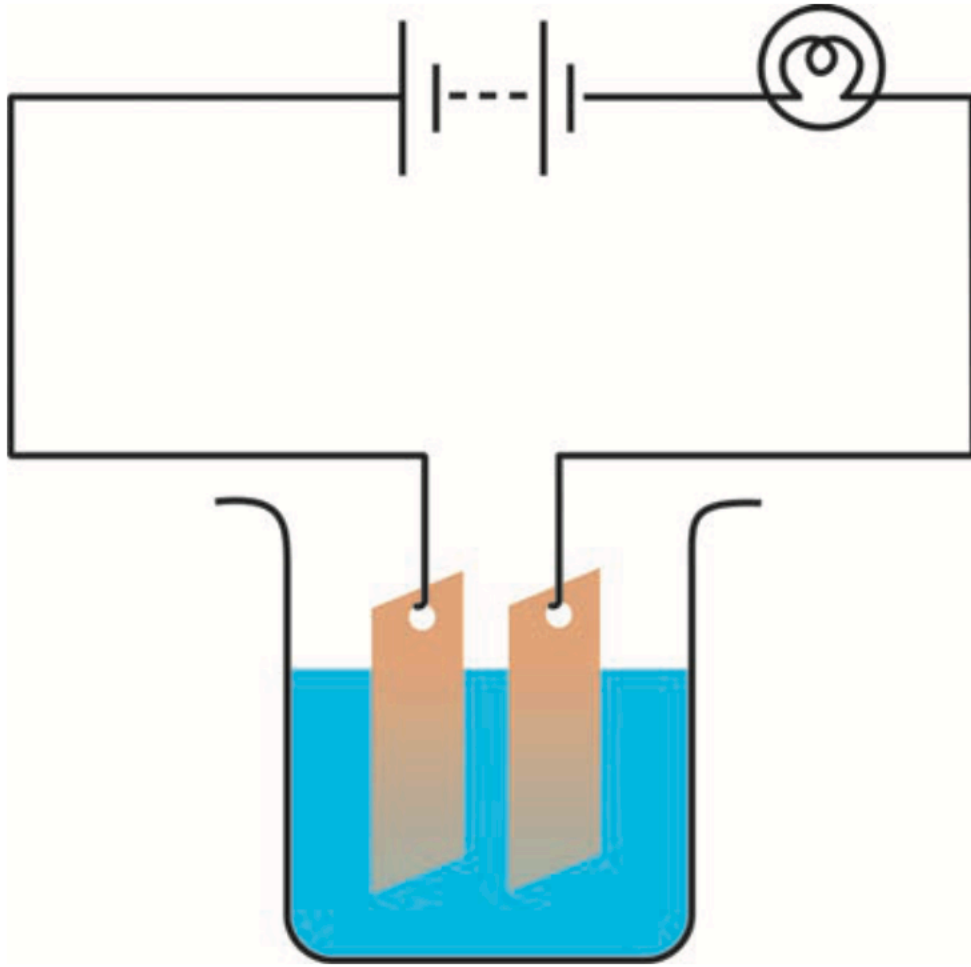


Fig. 14.11 A

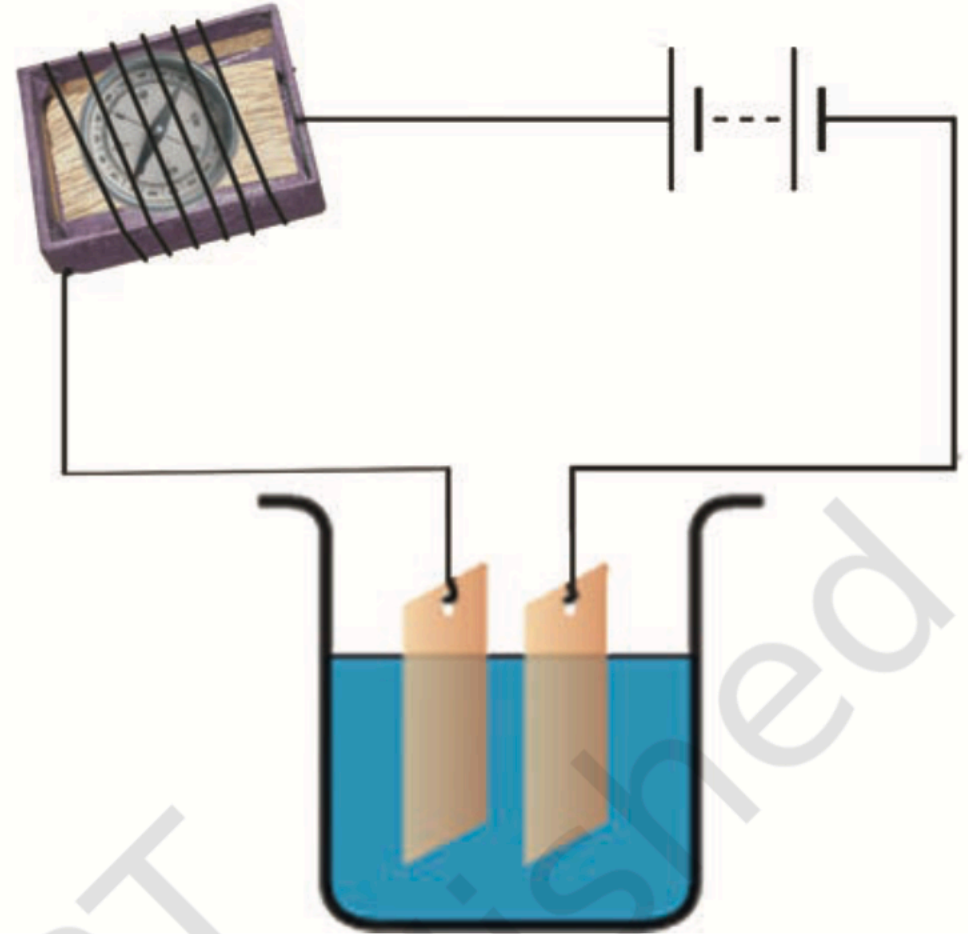


Fig. 14.11 B

- (i) What does the deflection in magnetic compass indicate?
- (ii) Why did the bulb not glow in Fig. 14.11 A?
- (iii) What would be the effect of increase in the number of turns in the coil wound around the magnetic compass in Fig. 14.11B?
- (iv) What will be observed if the number of cells are increased in the circuit shown in Fig. 14.11B?

8. Fill in the blanks

- (a) The object to be electroplated is taken as _____ electrode.
- (b) One of the most common applications of chemical effect of electric current is _____.

22. Boojho made the circuit shown in Fig. 14.10. He wanted to observe what happens when an electric current is passed through water. But he forgot to add a few drops of lemon juice to water. Will it make any difference to his observations? Explain.

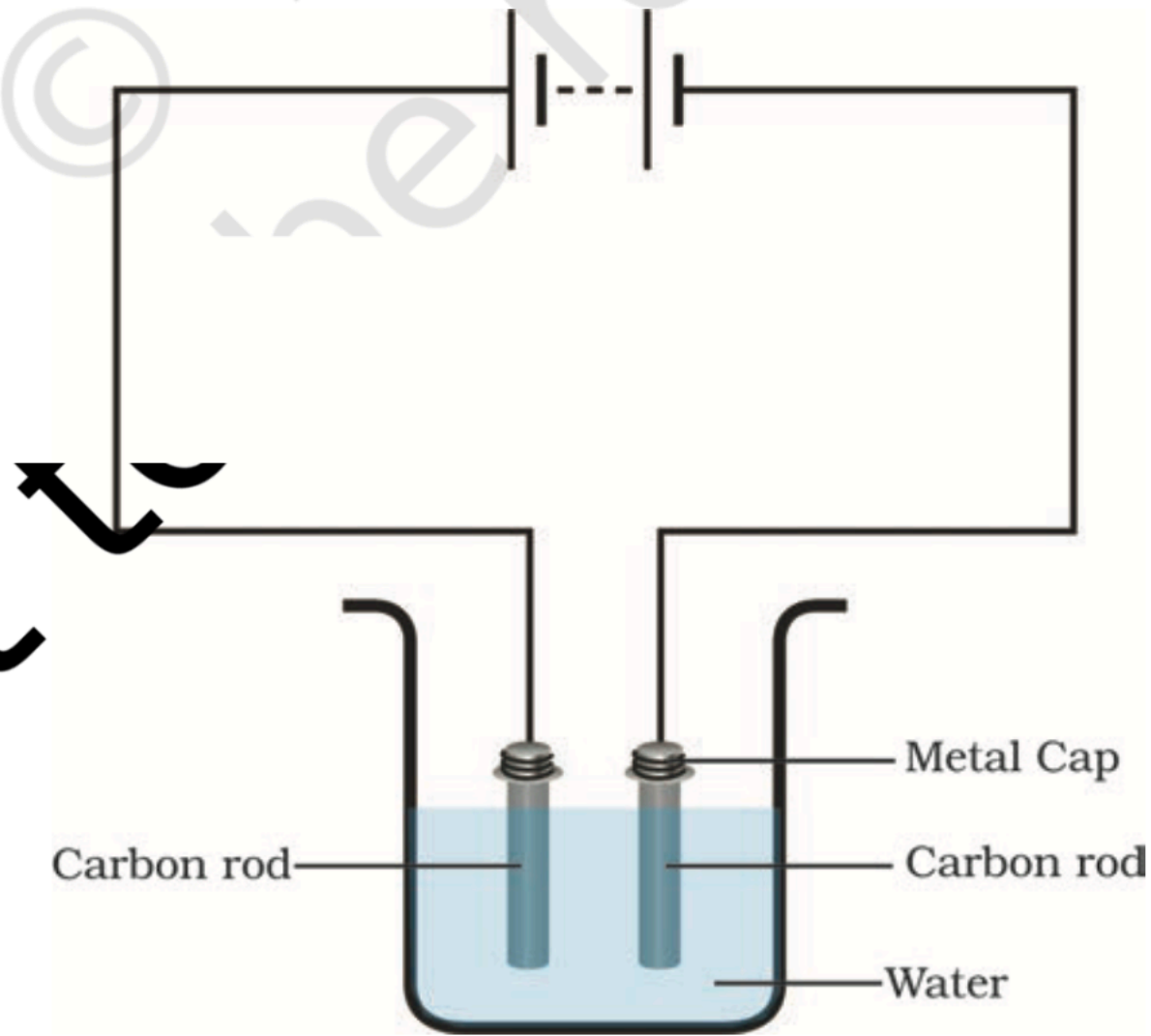


Fig. 14.10