

7. Suggest three measures to protect ourselves from lightning. Answer:

Protective measures against lightning are:

- Stay indoor or under covered area.
- Do not take bath during lightning.
- Do not use any electrical appliances during lightning.
- 8. Explain why a charged balloon is repelled by another charged balloon whereas an uncharged balloon is attracted by another charged balloon?

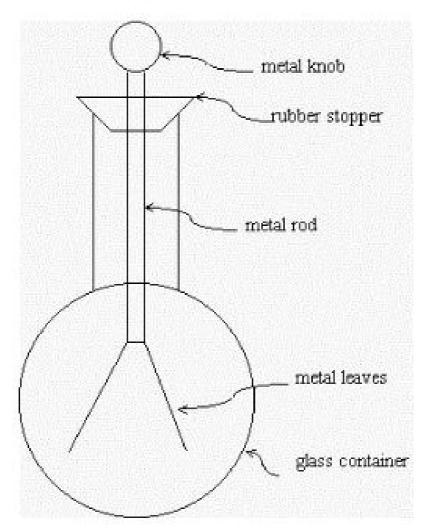
Answer:

A charged balloon is repelled by another charged balloon because both carry same charges and we know same charges repel each other whereas an uncharged balloon is attracted by charged balloon because unlike charges attract each other.

9. Describe with the help of a diagram an instrument which can be used to detect a charged body.

Answer:

An electroscope can be used to detect whether a body is charged or not. The following figure shows a simple electroscope.



In an Electroscope, two metal foils are hanged with the help of a conductor in a glass jar with a lid. When a charged body touches this conductor, its charged gets transferred to the metal foil and they move apart due to like charges. This shows that an electroscope detects charges.

10. List three states in India where earthquakes are more likely to strike.

Answer:

The three states in India where earthquakes are more likely to strike are Jammu and Kashmir, Gujrat, and Assam.

11. Suppose you are outside your home and an earthquake strikes. What precaution would you take to protect yourself? Answer:

Some of the precautions are:

- Try to move to an open space.
- We should not take shelter under trees, buildings or overhead power lines.
- If travelling in a bus or a car, then do not come out when an earthquake strikes. Ask the driver to drive in an open field.

12. The weather department has predicted that a thunderstorm is likely to occur on a certain day. Suppose you have to go out on that day. Would you carry an umbrella? Explain.

Answer:

No. We should not carry an umbrella in a thunderstorm. During thunderstorms, which are accompanied with lightning, electric discharge from the clouds can travel through the metallic rod of the umbrella. This may give an electric shock to the person who is carrying it. Hence, it is not safe to carry an umbrella during lightning.

