

Name: _____ Date: _____

Electricity and Circuits

Q1. Differentiate between open and closed circuit.

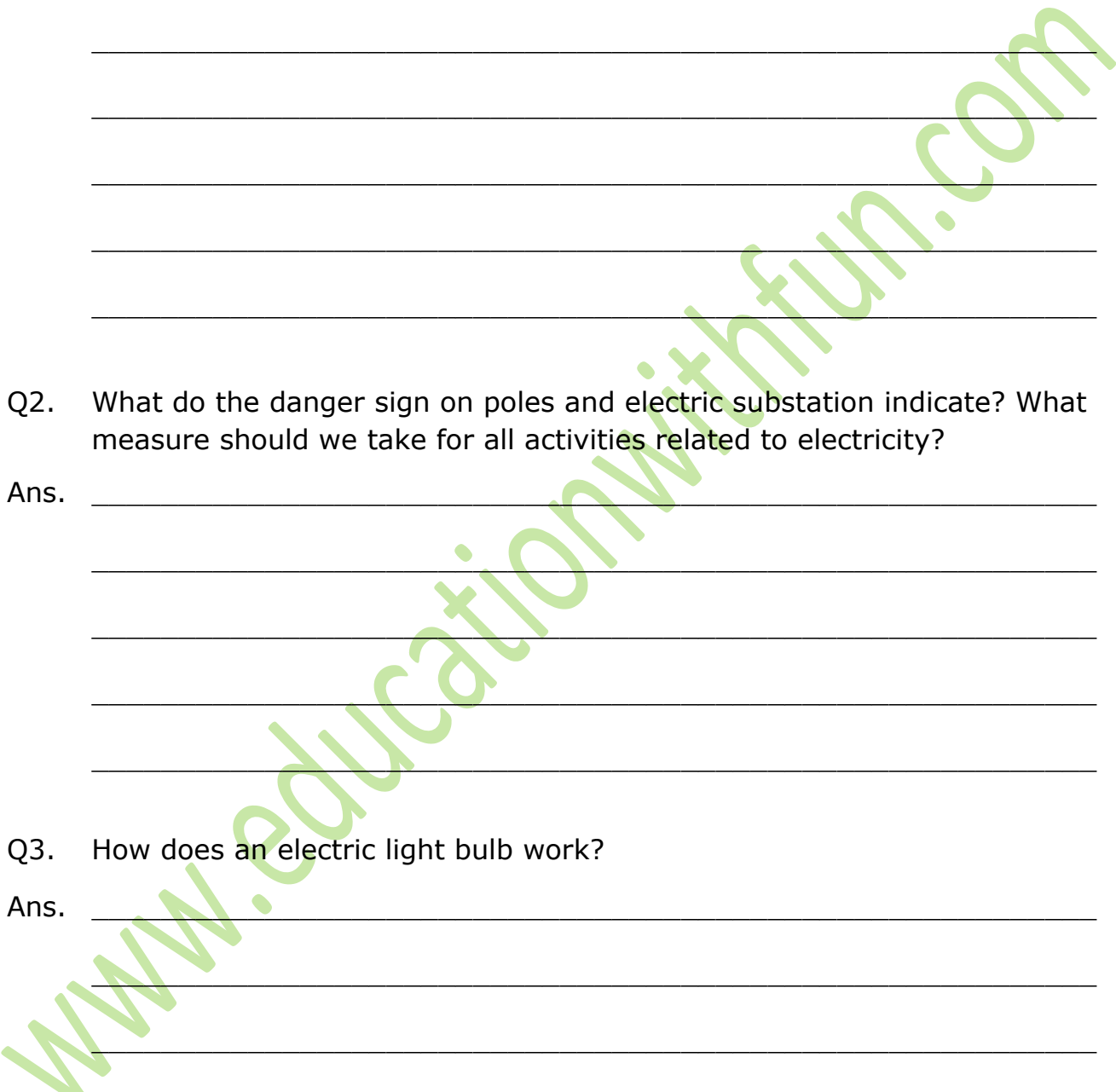
Ans. _____

Q2. What do the danger sign on poles and electric substation indicate? What measure should we take for all activities related to electricity?

Ans. _____

Q3. How does an electric light bulb work?

Ans. _____



Electricity and Circuits

Q1. Differentiate between open and closed circuit.

Ans. An open circuit is one where the continuity has been broken by an interruption in the path for current to flow. For example: a string of electric lights that don't work if one of the bulbs goes out.

A closed circuit is one that is complete, with good continuity throughout. For example: a circuit connected to a dead battery may not perform any work, but it is still a closed circuit.

Q2. What do the danger sign on poles and electric substation indicate? What measure should we take for all activities related to electricity?

Ans. Danger sign displayed on poles and electric substation to warn people that electricity can be dangerous if not handled properly. Carelessness in handling electricity and electric devices can cause severe injuries and sometimes even death.

We should use only electric cells for all activities related to electricity.

Q3. How does an electric light bulb work?

Ans. When the current flow through the bulb, the filament of the bulb glows and produces light. The inert gas inside the glass helps prevent the filament from becoming too hot and breaking. If there is any kind of breakage in the filament, it means that the thin coil inside has snapped and therefore electricity cannot flow completely through the circuit and the bulb will not glow. Such a bulb is said to be fused and needs to be replaced.