



ASSIGNMENT NO. 2

SUBJECT: SCIENCE

CLASS-VIII

July'2026

Chapter-4: Electricity: Magnetic and Heating Effects

Answer the following questions:

1. What is an electrolyte?
2. How is the dry cell considered convenient over the Voltaic cell?
3. How can you make a simple electromagnet at home?
4. What variables increase or decrease the heating effect of electric current?
5. Explain the role of materials in heating elements and why nichrome is preferred over copper for appliances like irons and heaters.
6. Compare and contrast heating and magnetic effects of electric current with examples.
7. Explain the structure of a Voltaic cell with the help of diagram.
8. How can you light an LED with lemons? Explain with the help of diagram.

Chapter-5: Exploring Forces

Answer the following questions:

1. What is the similarity between electrostatic and magnetic forces?
2. Explain why cycling uphill feels harder than cycling downhill.
3. A 1 kg object has a weight of about 10 N on Earth. What will be its weight on the Moon ($g \approx 1.6 \text{ m/s}^2$)?
4. A stone sinks in water but a sealed empty plastic bottle floats. Why?
5. An archer shoots an arrow in the air horizontally. However, after moving some distance, the arrow falls to the ground. Name the initial force that sets the arrow in motion. Explain why the arrow ultimately falls down.
6. What may be the consequences when a force is applied to an object?
7. Distinguish between contact forces and non-contact forces with examples.
8. Discuss how mass and weight differ and why the same object can have different weights on different planets while its mass remains unchanged.