

# Electricity

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## 1 Charges

The charge of a particle affects its properties.

- Like charges (positive  $\leftrightarrow$  positive, negative  $\leftrightarrow$  negative) repel.
- Opposite charges (positive  $\leftrightarrow$  negative) attract.
- Neutral charges attract with positive/negative charges.
  - Neutrons carry both positive and negative charges; if it comes with close proximity with a charged object, the corresponding charges in the neutron will attract and repel.

## 2 Electric fields

A region or space around a unit positive charge where it experiences an electrostatic force is known as an electric field.

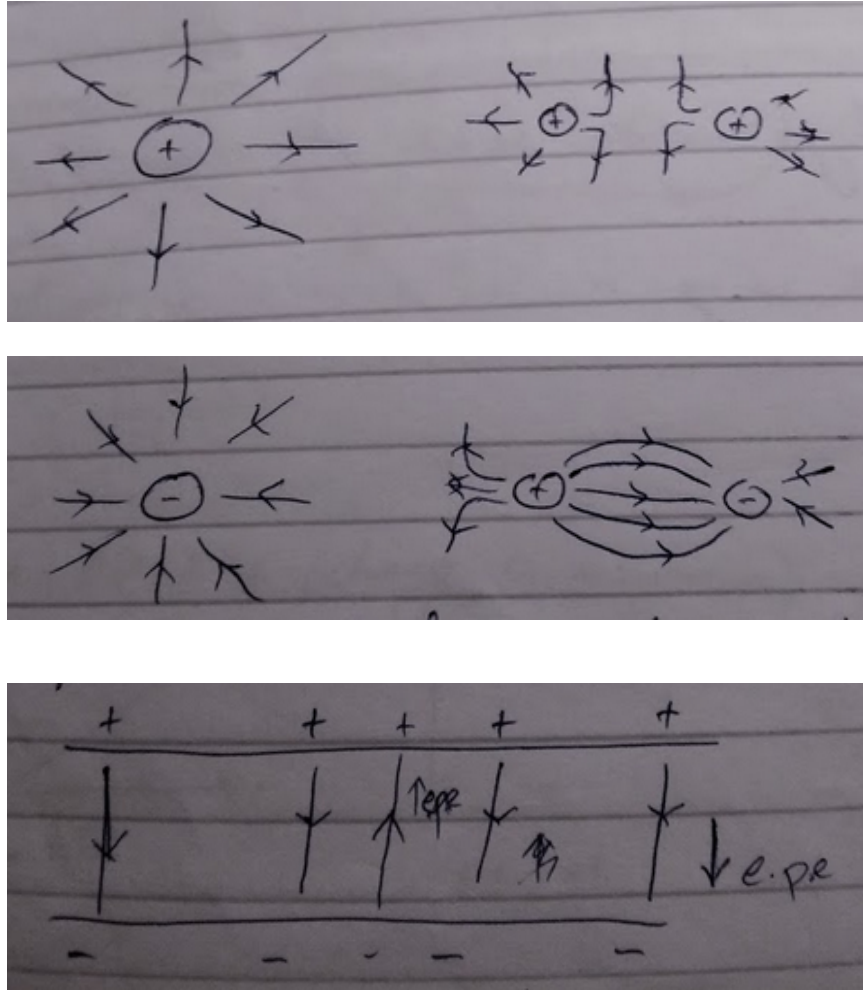


Figure 1: (Uniform field (uniform strength))

- The proximity of the field lines of an electric field determine how strong the field is. The closer the proximity, the stronger the field; the farther the proximity, the weaker the field.