

Electricity “I can” statements Outline (1/17)

I. Charges

- A. I can name the two kinds of charges and give appropriate symbols.
- B. I can explain what happens when an object contains the same number of each charge and I can state the name for this situation.
- C. I can explain the relative number of each type of charge normally present in objects.
- D. I can name the three “Laws of Charges” and I can identify which law is behind different phenomena.
- E. I can define electric fields and can demonstrate its existence. I can also name two factors that determine the strength of an electric field.

II. Properties of current electricity

- A. I can explain how electrons move in static and in current electricity
- B. I can define, construct, and give examples of a circuit.
- C. I can demonstrate what electrical conductors and insulators are. I can also identify and give examples of both of these.

III. Electromagnetism

- A & B. I can explain what moving charges can create and also what moving magnetic fields in conductors can create. I can also name devices that work based on these principles.

III. Electrical Safety

- A. I can explain how fuses and circuit breakers work.
- B. Lightning Safety
 - 1. indoors: I can describe three different electrical paths lightning can take into homes.
 - 2. Outdoors: I can explain where to go and what to avoid if I am caught outside during a lightning storm.