

Static Electricity

YOU WILL NEED A
SCIENCE BOOK
Pages 679-685

Intro.....Read: p.679

3 Main Questions

1. How do electric charges interact?
2. What is STATIC ELECTRICITY?
3. How are electrons transferred in static discharge?

How do electric charges interact? (p.680)

*Opposites Attract & Like charges repel. They push and pull each other.



- strongest near the charged particle or object.
- act independently by themselves.
- more charges you have the stronger the charge.

What is STATIC ELECTRICITY? (p.680)

Objects can GAIN or LOSE electrons. Some materials hold electrons more loosely than others.

It's when the object has an unbalanced number of charged particles that is stored on the object. This is called STATIC ELECTRICITY. Charges build up, but do not flow.

How are electrons transferred? (p.683-684)

1. CONTACT: (p.683) FRICTION by rubbing off electrons.

Socks in dryer, balloon, fuzzy slippers

DEMO: Balloons



2. INDUCTION: (p.683) Non contact between 2 objects.

Polarizing an object..... Lightning (big display of static transfer)

DEMO: Rolling Can, Match, Water Post-it,



3. CONDUCTION: (p.684) by direct contact

CONDUCTION: touching a TV screen, a metal object, cat's nose



Sometimes we want static electricity to exist!

- Plastic wrap when wrapping up leftover food.
- Xerox machine to make copies
- Dust removal
- Painting Metal: Cars...even your locker!



Static & Water Explained

Static Music [video](#)

