Static Uses

This can be used to save your life.

Jacob's Ladder

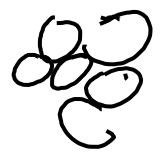
- As the warm air rises the spark also rises.
- Ark's across.

Conductors versus Insulators

- Structure is cubic crystal structure
- Many free electrons
- Electrons flow easily
- Static charge resides on outer surface equally distributed.
- Can be used as a shield against harmful EM radiation.

Conductors versus Insulators

- Electrons don't flow
- Complex molecular structure



Examples of each

- Conductors
 - silver
 - copper
 - gold
 - aluminum
 - dirty water
 - metals

- Insulators
 - glass
 - rubber
 - Silk
 - Fur
 - pure water

Demos

- Metal vs insulator for airplane material.
- Smoke precipitator to remove pollutants from air.
- Protective cage from electricity.
- Testing waters purity

Handout Questions

- Electrostatics study sheet
- Should be able to answer 3-7, 9, 10, back side