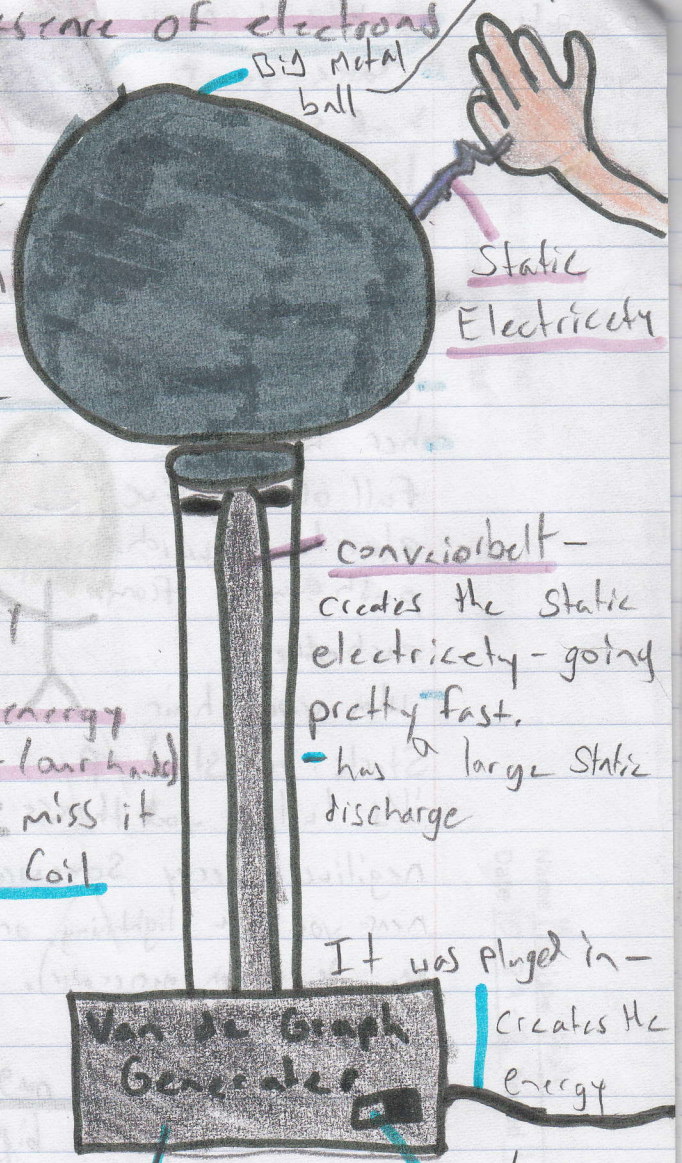
192-199

10/

Static Electricity Demo.

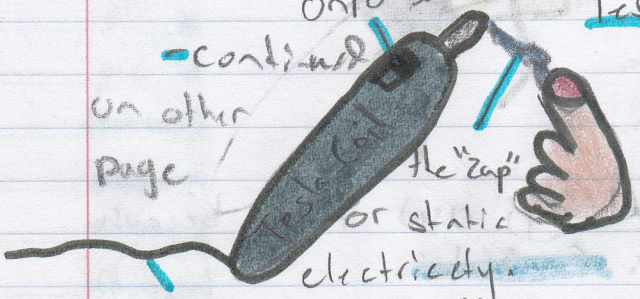
L.T: Identify evidence of the presence of electrons and static electricity.



Van de graaff Generator

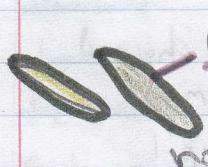
- Noisy motor
- it looks like a mini lightning bolt on your hands, if put a couple inches away from it
- crackles
- Makes my arm/hand tingle
- feels like a hard pole
- bluish light - Static electricity
- lightning - static electricity
- Static - a big collection of energy until it has a pathway out (our hands)
- literaly, if you blinked you'd miss it

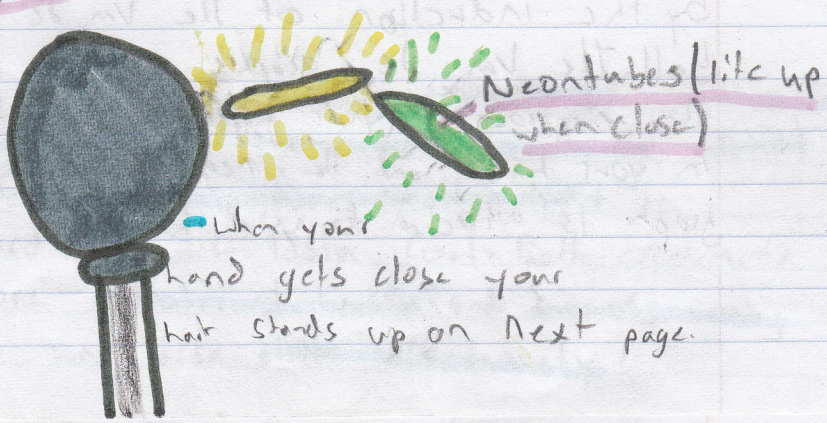
Tesla Coil



- continued on other page

Plugged in - created the energy





- Static Electricity = the accumulation of excess electric charge on an object.

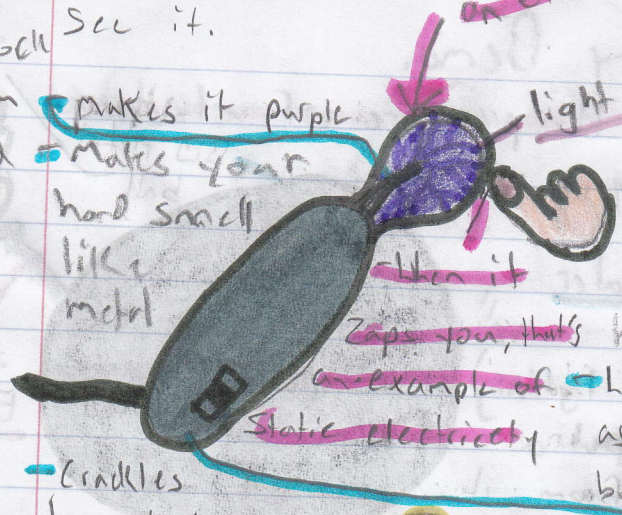
- When your hand gets close your hair stands up on Next page.

see other page

The light bulb is capturing the electronic feild so we can see it.

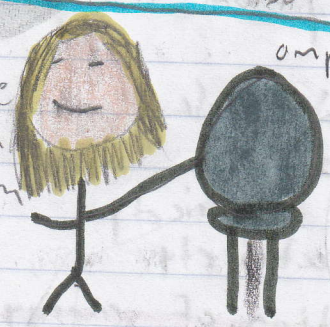
~~Evidence of an electronic feild.~~

- the shock passes from your hand to other people.



- makes it purple
- Makes your hand smell like metal
- ~~then it zaps you, that's an example of static electricity~~
- It shock you and it dosn't hurt as much as the van de graph-tingles
- Any close object is shocked
- the electrons are converted from the bulb into your hand
- has 50 thousand volts as much as a lightning bolt and tazer just low amps.

- Cradles
- her hair are full of negative electrons which push away from each other.

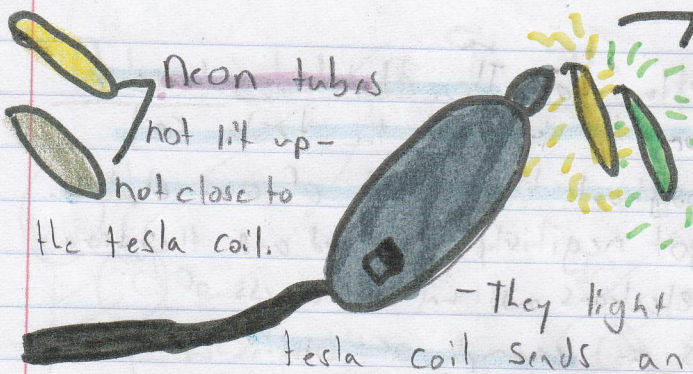


There are wires inside that produces the build up of electrons

- when your hair starts to stand up it's telling you there's **to** negitive energy somewear near you (like lightning or the van de graph generator).

<u>Note from First page</u> - they used metal because it's one of the biggest ~~conductors~~.

- ~~charging by contact~~ is what happened with the Van de Graph (the conveyer belt).
- ~~Charging by induction~~ our hands were charged by the induction of the Van de graph's metal ball. The Van de graph's negitive charge repel the negitive electrons of your hand. So then there are postives in your hand and the negitive energy of the vande graph is attracted to your hand.



- They light up because the tesla coil sends an electrical current through them, then the electrons colide with the gass molecules. The colision produces visable light. This proves that there is an electrical current coming out of it. Same thing with the Van de graph generator, it produced an electrical current for the lights to glow.

- Using the metal to travel through in your chair it will shock you