**Polar Molecules**

Today in Science class, Mr. Smith did a demonstration.

Polar Molecules

In this demonstration, Mr. Smith showed us how water is a polar molecule. This means that it has magnetic poles. Each of the hydrogen molecules in it is positively charged, and the oxygen molecule in it is negatively charged. Mr. Smith took a piece of PVC pipe and rubbed it on his hair to build up static electricity in it. Then, he put it next to a very thin stream of water, and the water stream bent toward the PVC pipe because it was magnetically attracted to the charged PVC pipe.

Things I learned:

* There are four groups of molecules:
  + NO3- -- The Nitrate group
  + NH4+ -- The Ammonium group
  + SO4 2- -- The Sulfate group
  + OH- -- The Hydroxide group
* A covalent bond is a bond in which two or more pairs of electrons are shared by two atoms.
* Covalently bonded atoms:
  + H2O (water)
  + Fe2O3 (rusted iron)
  + C3H8 (propane)
  + O2 (oxygen gas)
  + CH4 (methane gas)
  + C12H22O11 (sucrose)
  + AlCl2 (aluminum chloride) – this is what deodorant is made of.

