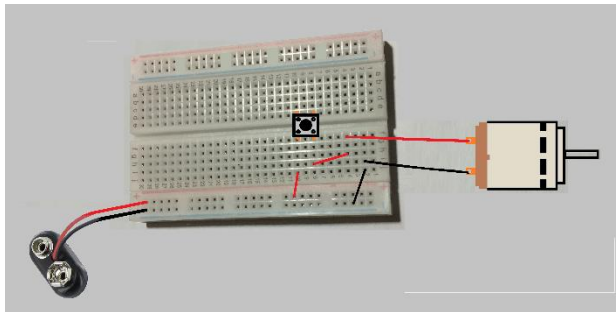




## Basic Electronics Series

### Assignment Lesson Two: Atomic Structure

1. Build the simple Light Emitting Diode circuit on the breadboard as shown in the lesson 2 supplemental.
2. Build the simple DC Motor circuit on the breadboard as shown here.



3. What is the polarity of each of the following Atomic particles?  
Neutron **Neutral**  
Electron **Negative**  
Proton **Positive**
4. What is an ION? **A Charged Atom**
5. What is the term for the electrons in the outer shell of an Atom?  
**Valence electron**
6. What determines the Atomic number of an Atom?  
**The number of Protons in the nucleus**

7. What is the unit for electrostatic charge? **Coulomb**
8. How many outer shell electrons are there in the following materials?  
Semiconductors **Four**  
Insulators **More than four**  
Conductors **Less than four**
9. When referring to Static electricity, what does ESD stand for?  
**Electro-Static-Discharge**
10. Define:  
Electric Current **Charge in Motion**  
Voltage **Electrical Pressure**  
Electrical Resistance **Opposition to current flow**
11. Extra Circuits to experiment with:

