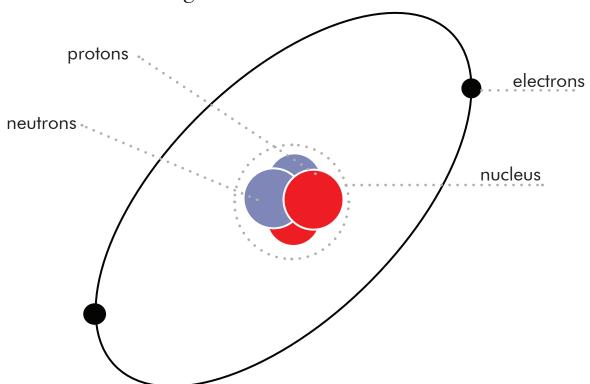
## Diagram of an Atom

Protons: have a positive electrical charge. Electrons: have a negative electrical charge.

Neutrons : are neutral.

Nucleus: is at the center of the atom. It is where the protons and neutrons are. The electrons swirl around the nucleus. Most of the atom's mass is in the nucleus.

## Diagram of a Helium Atom



Protons and electrons are attracted to each other, but protons repel protons and electrons repel electrons. All atoms have an equal number of protons and electrons. If an atom loses or gains an electron, then it becomes an ion. An ion is an electrically charged atom.



- 1. Get a balloon and rub it on your hair or clothes. The electrons from your hair or clothes will attach to the balloon and give it a negative (-) charge.
- 2. When the balloon is near the water the electrons on the negatively charged balloon move away from it. What is left is a positive(+) area of water near the balloon.
- 3. The positively-charged area of water and the negatively-charged balloon attract!

