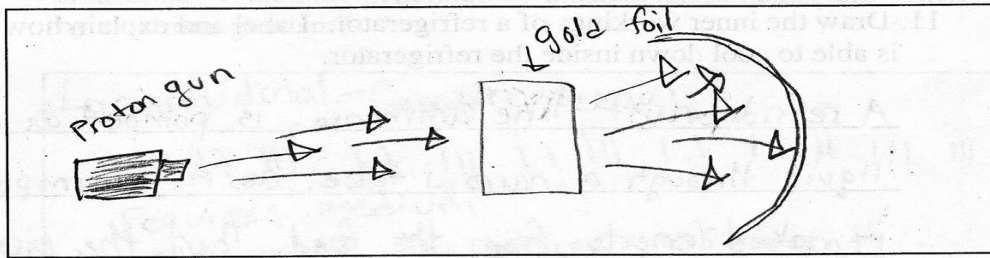


5. Rutherford figured out that atoms are mostly space! How did he do it? Draw a picture and label it to help explain.

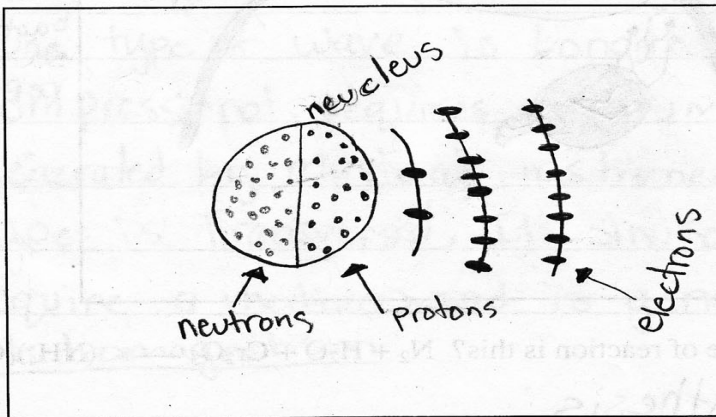
Rutherford fired protons at an one atom thick gold foil, and most of the time they went through. But  $1/1000^{\text{th}}$  time they didn't. This proves that the nucleus is positive and the nucleus is  $1/1000^{\text{th}}$  the size of the atom



6. Which is the only part of the atom involved in chemical reactions?

The valence electrons.

7. Draw and label the Bohr model & electron energy levels for Argon. Label the amount of Protons, Neutrons, and electrons.



Atomic mass: ~~34~~  
 Atomic # (protons & electrons): 18  
neutrons 22