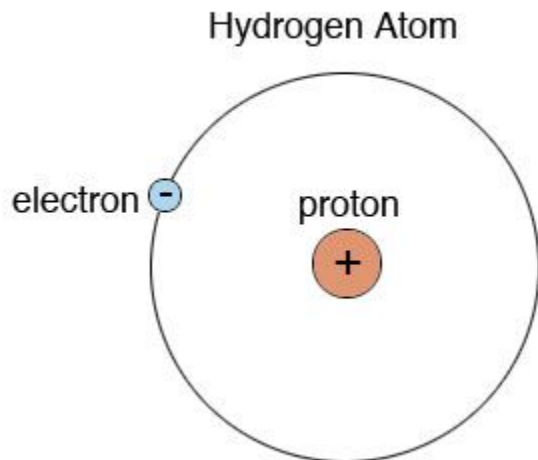


Learning Guide 2.3 - Atomic Theory



A proton has a diameter of: $0.84 \times 10^{-15} \text{m}$
 A hydrogen atom is roughly 1 \AA ($0.5 \times 10^{-10} \text{m}$)

This is 5 **Orders of magnitude** larger.

If you crunch yourself up to represent a proton in a 1 m^3 box, the electron circling you will be:

A proton is about 2000x bigger than an electron. If you are the proton, what is the size of the electron?

Fill in the table:

Name	Relative Mass	Electric Charge	Symbol	Location in Atom
proton	1836			
neutron	1837			
electron	1			

Draw the Bohr diagram for potassium:

Atoms in the same **group** have _____.

Atoms in the same **period** have _____.

Explain why metals tend to lose electrons and non-metals tend to gain them.

Explain,

Why elements get bigger going down the periodic table.

Why elements get smaller going across the periodic table.

