

### Atoms: Practice Worksheet

**Atom:** The smallest particle of matter; the smallest thing to exist that still has mass and takes up space.

**Atomic Structure:** the parts of the atom

**Protons:** Positively charged particles in the nucleus (+)

**Neutrons:** Particles in the nucleus with no charge (o)

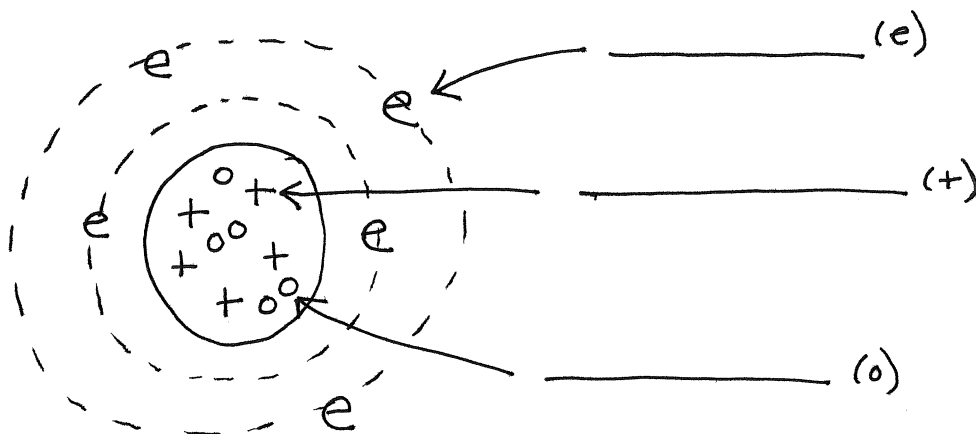
**Electrons:** Negatively charged particles found on energy clouds outside the nucleus (-)

**Atomic Number:** Number given to each atom; can be found on the periodic table

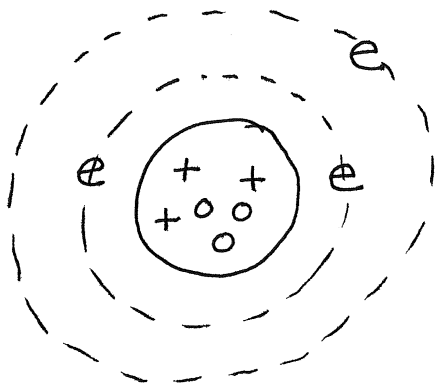
Atomic Number = Number of Protons

**Atomic Mass:** Protons + Neutrons; add up everything in the nucleus; can also be found on the periodic table

1. For the drawing of the atom, label the protons (+), neutrons (o), and electrons (-).

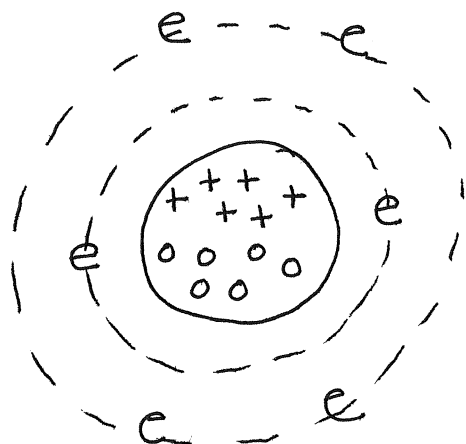


2. For the atom below, count the different particles.



Protons (+) \_\_\_\_\_  
 Neutrons (o) \_\_\_\_\_  
 Electrons (-) \_\_\_\_\_

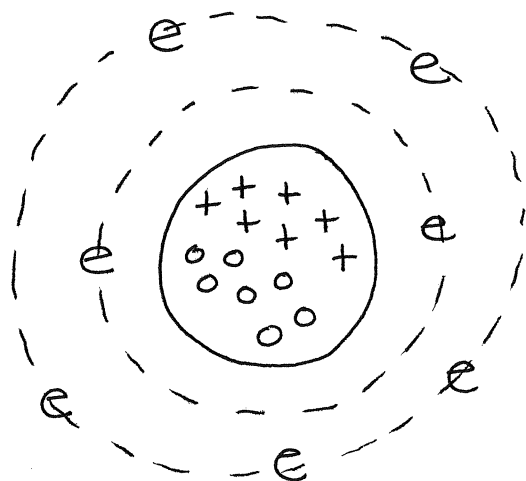
3. For the atom below, count the particles and decide the atomic number and mass.



Protons (+) \_\_\_\_\_  
Neutrons (o) \_\_\_\_\_  
Electrons (-) \_\_\_\_\_  
Atomic Number \_\_\_\_\_  
Atomic Mass \_\_\_\_\_

Use the Atomic Number and Periodic Table to determine which atom this is. \_\_\_\_\_

4. For the atom below, count the particles and decide the atomic number and mass.



Protons (+) \_\_\_\_\_  
Neutrons (o) \_\_\_\_\_  
Electrons (-) \_\_\_\_\_  
Atomic Number \_\_\_\_\_  
Atomic Mass \_\_\_\_\_

Use the Atomic Number and Periodic Table to determine which atom this is. \_\_\_\_\_

5. Find Oxygen on your periodic table.

What is the symbol for oxygen? \_\_\_\_\_

Atomic Number: \_\_\_\_\_

Atomic Mass: \_\_\_\_\_

If the atomic number is \_\_\_\_ then there are \_\_\_\_ protons and \_\_\_\_ electrons.

Neutrons = Atomic Mass – Protons so... Neutrons = \_\_\_\_\_ - \_\_\_\_\_ =

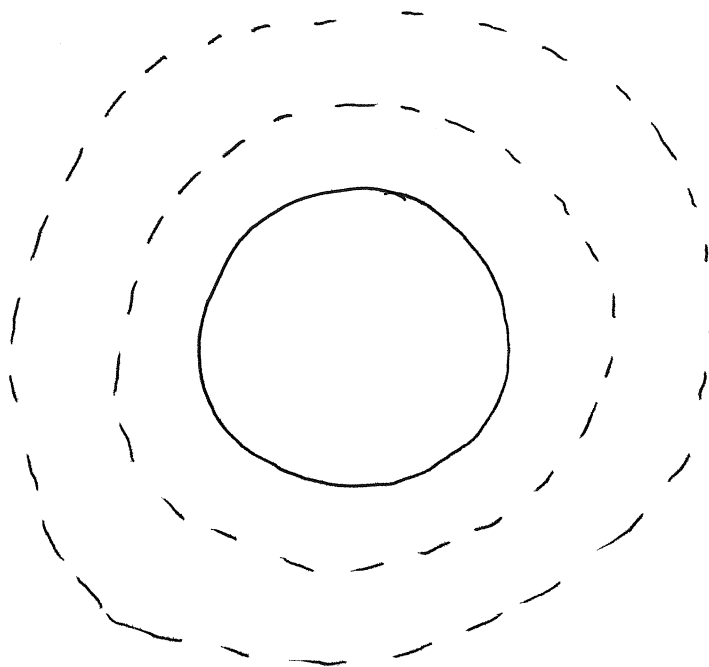
Oxygen:

Protons (+) \_\_\_\_\_

Neutrons (o) \_\_\_\_\_

Electrons (-) \_\_\_\_\_

6. Use the information above finish the drawing of oxygen below.



7. What is the hardest part about chemistry so far?