

**Chemistry 101**  
**Solutions to Quiz # 2**  
**Tuesday, September 16 Version**

Please complete the following questions. You may use the periodic table on the back and/or the one in the classroom. You may not use any notes or your own periodic table.

- (1 pt) Chlorine (Cl) is:
  - a noble gas
  - an alkali metal
  - an alkaline earth metal
  - a halogen ← *correct*
  - a transition metal
- (1 pt) Which of the following particles carries a positive electrical charge?
  - protons ← *correct*
  - neutrons
  - electrons
  -
- (1 pt) Is sulfur (S) a **metal** or **nonmetal** (circle one)?
- (1 pt) How many protons and electrons are there in a neutral atom of argon?

*Ar = atomic number 18, so 18 protons and 18 electrons*

- (6 pts, 2 each row) Complete the following table for neutral atoms:

Symbol	Atomic number	Mass number	number of protons	number of neutrons	Number of electrons
${}^{15}_7\text{N}$	7	15	7	8	7
${}^2_1\text{H}$	1	2	1	1	1
${}^{40}_{18}\text{Ar}$	18	40	18	22	18