

Unit2 (Astrophysics - cosmology), part 01 of 02
SCIE 2320 Scioli
Spring 2012

1. Draw the structure of the atom and the electron shells for the following elements :

Ca (Calcium)

Br (Bromine)

2. Which of the above is more massive? Why?

3. How many bonds can each of the above make?

4. If two atoms form a bond and have a difference in electronegativity, what does that difference in electronegativity tell you?

5. For the following atoms, how many total electrons do they have? Assume they are neutral.

He (Helium) Ne (Neon) N (Nitrogen) Al (Aluminum) Ca (Calcium)

For the following atoms, how many valence electrons do they have?

He (Helium) Ne (Neon) N (Nitrogen) Al (Aluminum) Ca (Calcium)

For the following atoms, how many unpaired valence electrons do they have?

He (Helium) Ne (Neon) N (Nitrogen) Al (Aluminum) Ca (Calcium)

For the following atoms, how many bonds can they make?

He (Helium) Ne (Neon) N (Nitrogen) Al (Aluminum) Ca (Calcium)
