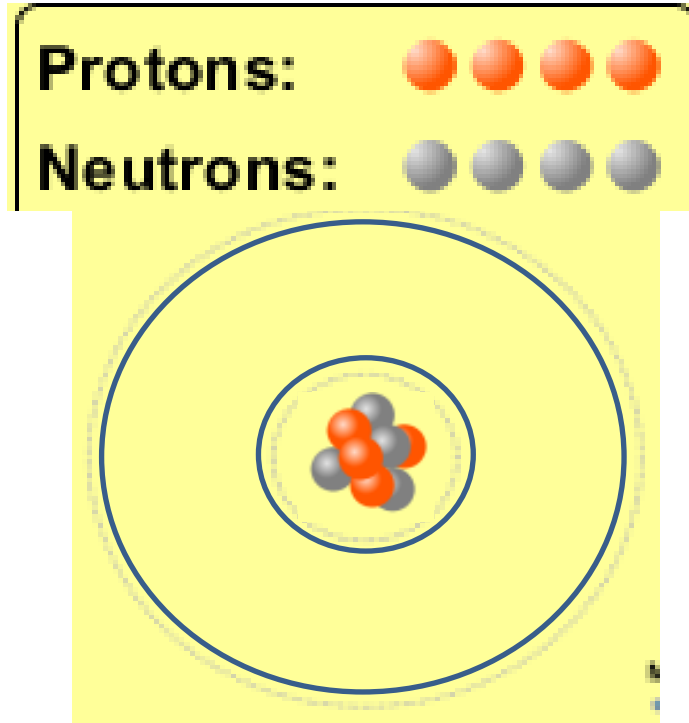
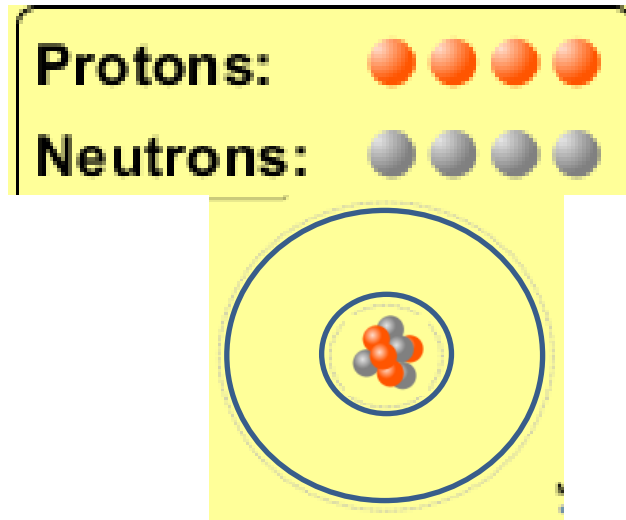


1. What can you make with 4 protons and 4 neutrons?

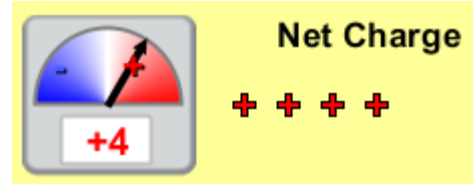
- A. Oxygen atom
- B. Beryllium atom
- C. both of these



2. Would you predict that 4 protons and 4 neutrons will make a stable nucleus?



A. No, because the net charge is high



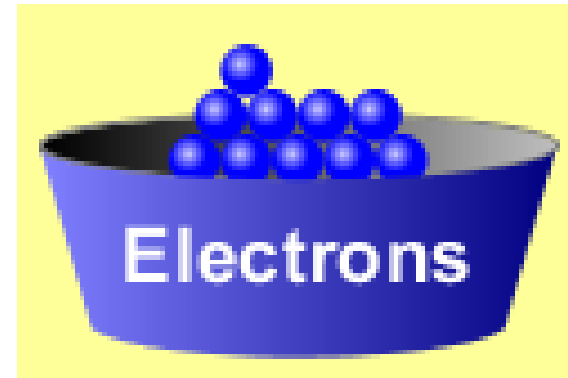
B. No, because there should always be more protons than neutrons

C. Yes, because the number of protons and neutrons are about equal

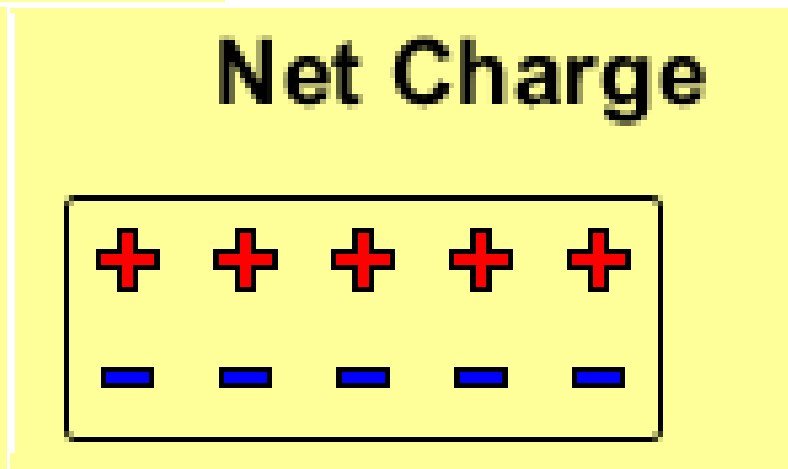
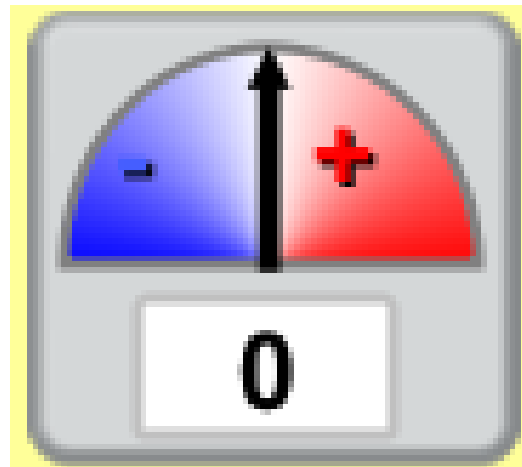
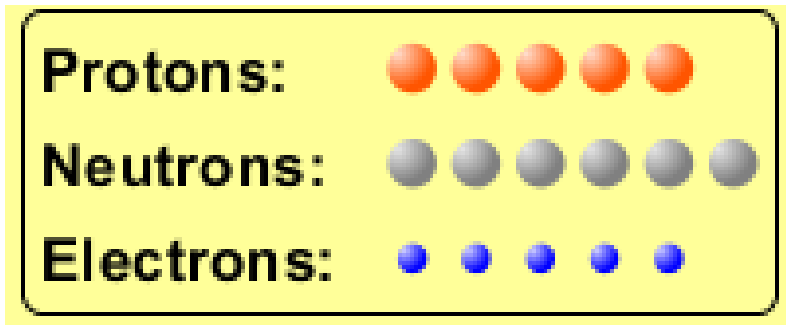
3. If you have 5 protons & 6 neutrons, how many electrons would you add to make a neutral atom ?

- A. 5 electrons
- B. 6 electrons
- C. 11 electrons

Protons: ● ● ● ● ●
Neutrons: ● ● ● ● ● ●
Electrons:

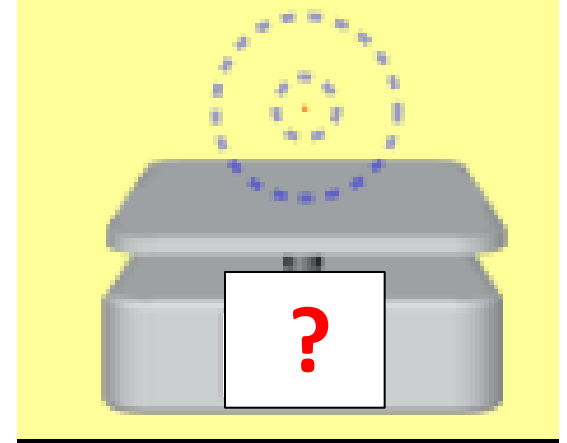


3. Reasoning: Neutrons don't matter because they have zero charge; need equal number of protons and electrons






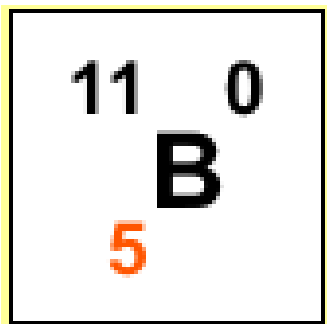
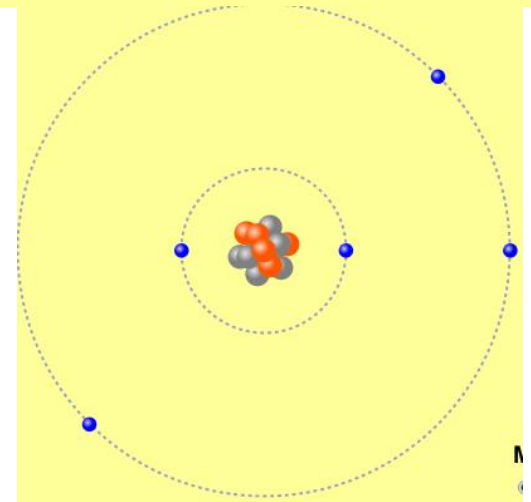
4. What is mass number for an atom with 8 protons, 9 neutrons and 8 electrons?

- A. Zero
- B. 8
- C. 16
- D. 17
- E. 25

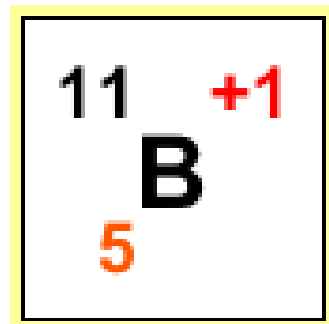


5. If you have 5 protons, 6 neutrons, & 5 electrons, what would the symbol look like?

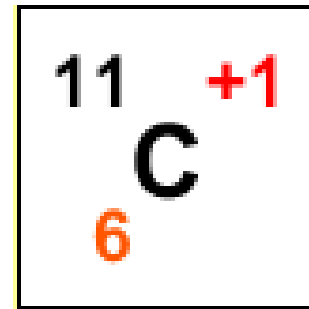
Protons: 
Neutrons: 
Electrons: 



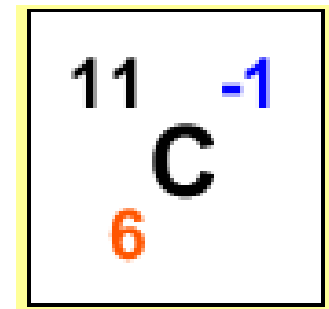
A



B



C

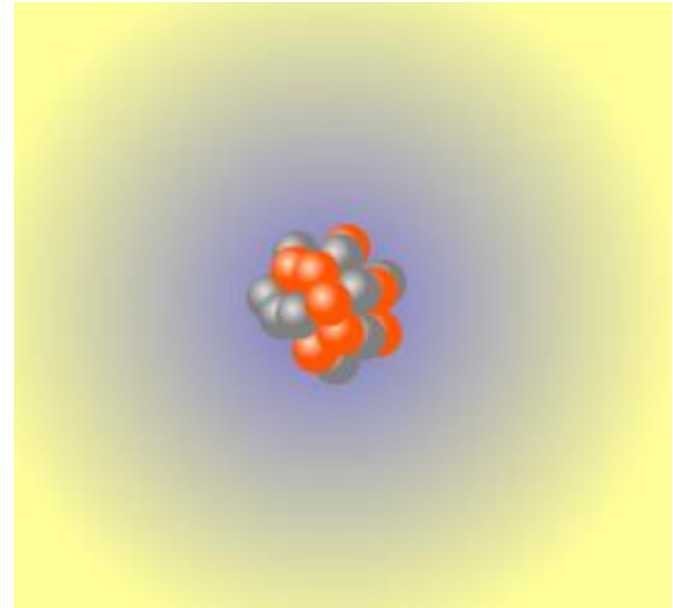


D

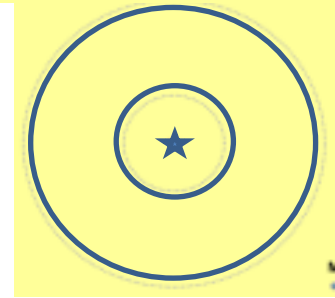
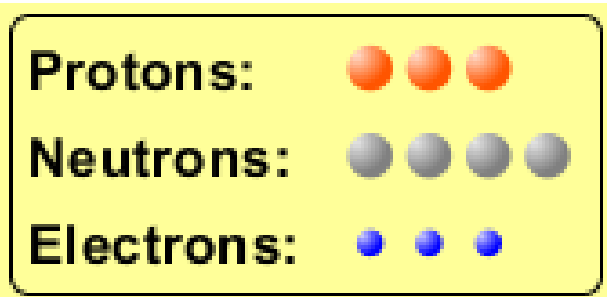
6. If you have 8 protons, 9 neutrons, 10 electrons, what would the atom or ion be?

- A. Zero, it's an atom
- B. +2 ion
- C. +1 ion
- D. -1 ion
- E. -2 ion

Protons: ●●●●●●●●
Neutrons: ●●●●●●●●●
Electrons: ●●●●●●●●●●

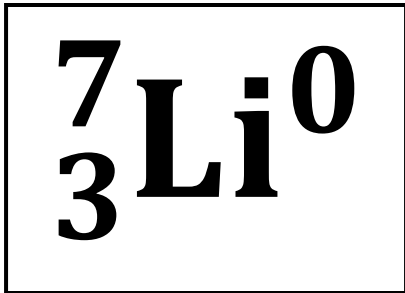
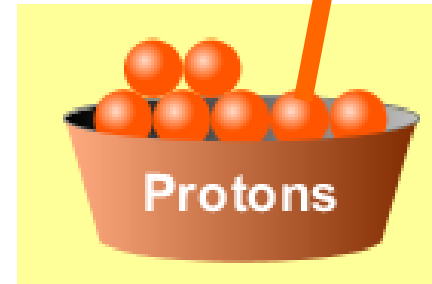


7. If you have 3 protons, 4 neutrons, & 3 electrons, what would the model look like?

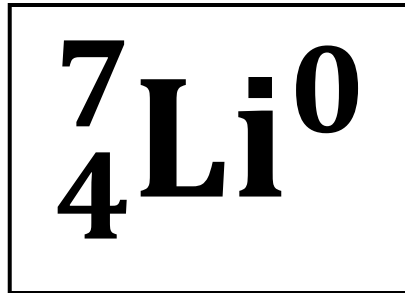


- A. 3 red & 3 blue in center; 4 grey on rings
- B. 3 red & 4 grey in center; 3 blue on rings
- C. 3 blue & 4 grey in center; 3 red on rings

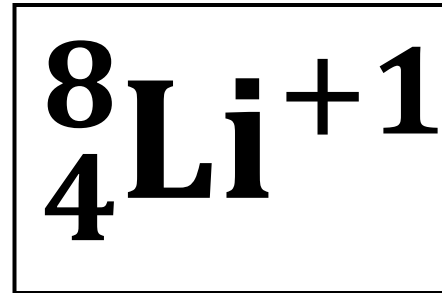
8. If a particle has 3 protons, 4 neutrons, & 3 electrons, then a proton is added, what would the symbol be?



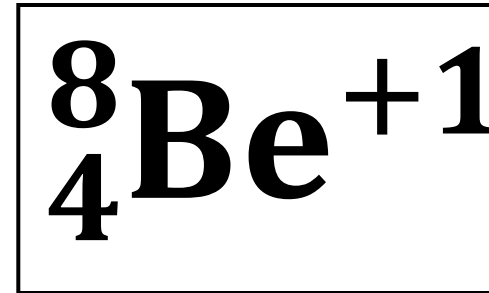
A



B



C



D