1. **Which subatomic particle in the atom has a neutral charge?**
2. **Which subatomic particle in the atom determines the charge of the atom?**
3. **Draw and label the atom making sure to include the nucleus, neutrons, electrons, and protons:**
4. **How many protons are in an atom of Potassium?**
5. **When comparing Selenium, Arsenic, and Bromine, which one has the least amount of neutrons?**
6. **What is an isotope?**
7. **How many neutrons are in Neon-22?**
8. **Element X has four isotopes of equal abundance: 120X, 128X, 132X, and 136X. If the average atomic mass is 135.4, which of the isotopes is most abundant?**
9. **How do elements, compounds, and mixtures differ?**
10. **Label the pictures below as an element, compound, or mixture:**
11. **Draw the Bohr model for Nitrogen:**
12. **How many valence electrons are in a carbon atom?**
13. **An atom has 30 total electrons. How many of those electrons are valence electrons?**
14. **What is an ion and how is it formed?**
15. **What is the charge Selenium when it forms an ion?**
16. **What is the charge of an ion that loses 3 electrons?**
17. **How many moles are in 3.5g of NaOH?**
18. **How many grams are in 3.05 x 1024 atoms of zinc?**
19. **How many atoms are in 10.5 grams of H2O?**
20. **How many grams are in 2.73 x 1022 molecules of CO2?**