Solutions

Chapter 4 Test Review

1. Study the vocabulary (Quizlet set on the webpage)
2. What is needed to calculate the atomic mass of an element? # Protons + Neutrons
3. What does the number 18 in the name Oxygen-18 represent? Mass # (Protons + Neutrons)
4. Atoms of the SAME element have the same number of what? Protons
5. What particles are found in the nucleus of an atom? Protons + Neutrons
6. What is the difference between atomic mass and mass number? Atomic Mass → Weighted Average
   Mass # = protons + neutrons
7. What subatomic particle has a positive charge? Proton
8. What subatomic particle has a negative charge? Electron
9. What subatomic particle has a neutral charge? Neutron
10. What is an isotope? Element with different # of neutrons
11. What is necessary to calculate the atomic mass of an element?
12. What subatomic particle is NOT located in the nucleus? Electron
13. The smallest particle of an element that retains the properties of that element is? Atom
14. How many neutrons are in Magnesium – 27 15
15. What is atomic number? # of Protons
16. Isotopes of the same element have different what? neutrons
17. Name two elements that have properties similar to those of the element Sodium. Li, K, Rb
18. Write the symbol for Oxygen-19 using superscripts and subscripts. $^{19}_{8}O$
19. There are three isotopes of silicon; they have mass numbers of 28,29, and 30. The atomic mass of silicon is 28.086amu. Which isotope is the most abundant?

The isotope 28