

Isotope Notation

Chem Worksheet 2-1

Name _____

Answer the following questions about atoms.

1. The identity of an atom is determined by the number of _____
2. The particle(s) found inside the nucleus are called: _____
3. The number of protons and neutrons combined is called the _____
4. In an atom the number of protons is always equal to the number of _____
5. The number of protons is also called the _____
6. Two atoms with the same number of protons but different numbers of neutrons is called a(n) _____
7. The number of protons found in a sulfur atom is _____
8. The number of neutrons found in an aluminum-27 atom is _____
9. The number of electrons found in a zinc atom is _____
10. What is the name of the element with 82 protons? _____

Give the symbols for the nuclides described by the following particles.

- | | |
|------------------------------|-----------------------------|
| 11. 92 protons, 145 neutrons | 15. 20 protons, 20 neutrons |
| 12. 8 protons, 10 neutrons | 16. 22 protons, 23 neutrons |
| 13. 82 protons, 125 neutrons | 17. 18 protons, 22 neutrons |
| 14. 78 protons, 117 neutrons | 18. 25 protons, 32 neutrons |

Determine the number of protons and neutrons from the following symbols.

- | | |
|------------------------------|----------------------------|
| 19. ${}^{10}_5\text{B}$ | 24. ${}^{56}\text{Fe}$ |
| 20. ${}^{15}_7\text{N}$ | 25. ${}^{151}\text{Sm}$ |
| 21. ${}^{79}_{34}\text{Se}$ | 26. ${}^{195}\text{Pt}$ |
| 22. ${}^{119}_{50}\text{Sn}$ | 27. ${}^{200}\text{Hg}$ |
| 23. ${}^{165}_{66}\text{Dy}$ | 28. ${}^{93}_{41}\text{?}$ |