

Unit 1 HD #2 PARTS OF AN ATOM - Answers ①

1. Atomic mass units
2. The protons and neutrons
3. Proton = p^+ = 1 AMU / Neutron = n^0 = 1 AMU
Electron = e^- = 0 AMU
4. Electron = - Proton = + Neutron = 0
5. Protons (p^+) and neutrons (n^0)
6. Around the nucleus in orbits in the electron cloud.
7. # of protons
8. Mass # = # of protons + # of neutrons
9. 12
10. An ion is an atom with an unequal # of protons and electrons.
11. 11
12. Mass # = 23
13. Atoms with the same # of protons (same atomic #) but with different #s of neutrons (thus different atomic mass).
14. $U = 92$ protons so U^{238} must have different #s of neutrons.
15. Atomic masses are the relative mass of the atoms of the elements.
- 16.

10
Ne
20.18

Unit 1 Hw 2 Atoms' (cont)

17. 3, 29, 4

18. He = 4.00 amu $Z_n = 65.39$ amu $A_e = 26.98$ amu

19. Ne, K, Mg

20. Au has 117 protons and 117 electrons. # of protons and electrons, so it will have a + charge (lose protons) OR a - charge (lose electrons).

21. 9, 27, 5

22. $10e^- + 9p^+ \Rightarrow$ charge on atom = -1