

Name \_\_\_\_\_

Date \_\_\_\_\_

### 6.4 a, b, c Subatomic Particles

The table below contains information about several elements. In each case, enough information has been provided for you to fill in the blanks. Assume all atoms are neutral (have no charge).

Name	Symbol	Atomic Number	Atomic Mass Number (rounded)	# of Protons	# of Electrons	# of Neutrons
1. Calcium	Ca	20	40	20	20	20
2. Magnesium	Mg	12	24	12	12	12
3. Hydrogen	H	1	1	1	1	0
4. Gold	Au	79	197	79	79	118
5. Iron	Fe	26	56	26	26	30
6. Mercury	Hg	80	201	80	80	121
7. Chlorine	Cl	17	35	17	17	18
8. Bismuth	Bi	83	209	83	83	126
9. Strontium	Sr	38	67	38	29	
10. Xenon	Xe	54	131	54	54	77

11. How do atoms of one element differ from atoms of another element? In other words, what make gold atoms gold and silver atoms silver? \_\_\_\_\_ It's only one type of atom or you could write, the number of protons in each element's atom.

12. What is the center of the atom called? **SPELL IT CORRECTLY!** \_\_\_\_\_ nucleus \_\_\_\_\_

13. What subatomic particles are found in the atomic nucleus? \_\_\_\_\_ protons and neutrons \_\_\_\_\_

14. What subatomic particle orbits the nucleus? \_\_\_\_\_ electrons \_\_\_\_\_