

Name \_\_\_\_\_  
Period \_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

## 2 • Atomic Structure & Nuclear Chemistry

### ATOMIC NUMBER & MASS NUMBER

Complete the following chart and answer the questions below. *HINT: The number that appears after the element name in the first column is the mass number.*

	<i>Element Name</i>	<i>Atomic Number</i>	<i>Number of Protons</i>	<i>Number of Neutrons</i>	<i>Mass Number</i>
1.	carbon – 12				12
2.		8		8	
3.	hydrogen – 1				1
4.			6		14
5.	hydrogen – 3			2	
6.	nitrogen – 14				14
7.				1	2
8.		92		146	
9.	cesium – 137			82	
10.		11		12	
11.			47		108
12.	tungsten – 184			110	
13.				45	80
14.			24		52
15.				89	152
16.	silver – 107				107
17.		76		114	

- How are the *atomic number* and the *number of protons* related to each other?
- How do the *number of protons*, *number of neutrons*, and the *mass number* relate to each other?
- What is the *one thing* that determines the identity of an atom (that is, whether it is an oxygen atom or a carbon atom, etc.)?