

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period: \_\_\_\_\_

**Atomic Mass and Atomic Number Worksheet**

Name of Element	Symbol	Atomic Number	Atomic Mass	Protons	Neutrons	Electrons
Copper				29	35	29
Tin	Sn				69	50
	I	53	127			
Uranium			238			92
	K			19	20	
Lithium			7	3		
	O	8			8	
Gold		79	197			
		16	32	16		
Silver		47	108	47		
Chromium					28	24
	Co		59		32	27
	Ni			28		
Zinc		30			35	
	Al				14	13
	Hg	80	201			
Platinum			195			
	Fe		56		30	
	H	1	1			
	He	2	4			
		4		4		4
	Mg			12	12	12
	C	6		6	6	
Silicon		14			14	
	Cl			17	18	
	Bi		209			83
Boron		5	11			
	Ca	20				20
		25	55	25		
Lead			207			82
Sodium	Na					
Fluorine				9	10	9
	P	15	31			

Name \_\_\_\_\_

1)

Why are the atomic masses for most elements not whole numbers?

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2)

How are the three isotopes of hydrogen ( ${}^1_1\text{H}$ ,  ${}^2_1\text{H}$ ,  ${}^3_1\text{H}$ ) alike? How are they different?

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3)

If we took the average mass of the 3 isotopes of hydrogen ( $1 + 2 + 3 = 6 \div 3 = 2$ ), the mass would be 2. Why then is the mass of hydrogen 1.00794 on the periodic table?

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4)

Copper has two isotopes, copper-63 and copper-65. The relative abundance of Cu-63 is 69.1% and it has an average mass of 63 amu. The relative abundance of Cu-65 is 30.9% and it has an average mass of 65 amu. Calculate the average atomic mass of copper. (Show all your work)

Compare this to the mass of Cu on the periodic table.

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