Basic Atomic Structure Worksheet

a	1. The 3 particles of the atom are:	Their respective charges are:	
c	a	a	
c	b	b	
of electrons determines the			
you the number of in a neutral atom of that element. The atomic number gives the "identity" of an element as well as its location on the periodic table. No two different elements will have the atomic number. 4. The of an element is the average mass of an element's naturally occurring atom, or isotopes, taking into account the of each isotope. 5. The of an element is the total number of protons and neutrons in the of the atom. 6. The mass number is used to calculate the number of in one atom of an element. In order to calculate the number of neutrons you must subtract the from the 7. Give the symbol of and the number of protons in one atom of: Lithium Bromine			, and the number
you the number of in a neutral atom of that element. The atomic number gives the "identity" of an element as well as its location on the periodic table. No two different elements will have the atomic number. 4. The of an element is the average mass of an element's naturally occurring atom, or isotopes, taking into account the of each isotope. 5. The of an element is the total number of protons and neutrons in the of the atom. 6. The mass number is used to calculate the number of in one atom of an element. In order to calculate the number of neutrons you must subtract the from the 7. Give the symbol of and the number of protons in one atom of: Lithium Bromine	3. The atomic number tells you the number of	in one atom (of an element. It also tells
"identity" of an element as well as its location on the periodic table. No two different elements will have the atomic number. 4. The of an element is the average mass of an element's naturally occurring atom, or isotopes, taking into account the of each isotope. 5. The of an element is the total number of protons and neutrons in the of the atom. 6. The mass number is used to calculate the number of in one atom of an element. In order to calculate the number of neutrons you must subtract the from the 7. Give the symbol of and the number of protons in one atom of: Lithium Copper Oxygen Mercury Helium 8. Give the symbol of and the number of electrons in a neutral atom of: Uranium lodine Nectron Helium 9. Give the symbol of and the number of neutrons in one atom of: Wenon Hydrogen-3	you the number of in a neut	tral atom of that element. The ato	omic number gives the
4. The of an element is the average mass of an element's naturally occurring atom, or isotopes, taking into account the of each isotope. 5. The of an element is the total number of protons and neutrons in the of the atom. 6. The mass number is used to calculate the number of in one atom of an element. In order to calculate the number of neutrons you must subtract the from the 7. Give the symbol of and the number of protons in one atom of: Lithium Bromine Copper Oxygen Mercury Helium 8. Give the symbol of and the number of electrons in a neutral atom of: Uranium lodine Senon Chlorine Seron Senon 9. Give the symbol of and the number of neutrons in one atom of: (Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141 Bismuth-211 Bismuth-211 Seron Fluorine-20 Magnesium-25 Europium-157 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons [neutral atoms]	"identity" of an element as well as its location on the period		
isotopes, taking into account the of each isotope. 5. The of an element is the total number of protons and neutrons in the of the atom. 6. The mass number is used to calculate the number of in one atom of an element. In order to calculate the number of neutrons you must subtract the from the 7. Give the symbol of and the number of protons in one atom of: Lithium Bromine	atomic number.		
isotopes, taking into account the of each isotope. 5. The of an element is the total number of protons and neutrons in the of the atom. 6. The mass number is used to calculate the number of in one atom of an element. In order to calculate the number of neutrons you must subtract the from the 7. Give the symbol of and the number of protons in one atom of: Lithium Bromine	4. The of an element is the avera	nge mass of an element's naturally	y occurring atom, or
of the atom. 6. The mass number is used to calculate the number of		=	,
of the atom. 6. The mass number is used to calculate the number of	5. The of an element is the total	I number of protons and peutron	s in the
6. The mass number is used to calculate the number of		in number of protons and neutron	3 111 (116
to calculate the number of neutrons you must subtract the from the			
7. Give the symbol of and the number of protons in one atom of: Lithium Bromine Copper Oxygen Mercury Helium 8. Give the symbol of and the number of electrons in a neutral atom of: Uranium Iodine Soron Xenon Chlorine 9. Give the symbol of and the number of neutrons in one atom of: (Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141 Bismuth-211 Hydrogen-3 Hydrogen-3 Fluorine-20 Magnesium-25 Mercury-199 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons Mercury Me			
7. Give the symbol of and the number of protons in one atom of: Lithium		from t	ne
Lithium Bromine Copper Copper Copper Mercury Mercury Helium 8. Give the symbol of and the number of electrons in a neutral atom of: Uranium Iodine Soron Xenon Chlorine Signature of and the number of neutrons in one atom of: (Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141 Bismuth-211 Carbon-13 Hydrogen-3 Hudrogen-3 Fluorine-20 Magnesium-25 Mercury-199 Mercury-199 Signatur-157 Mercury-199 Signatur-199 S	·		
Copper	7. Give the symbol of and the number of protons in one ator	m of:	
Copper	Lithium	Bromine	
Oxygen Krypton Mercury Helium 8. Give the symbol of and the number of electrons in a neutral atom of: Uranium lodine Name Name Name Name Name Name Name Nam	Iron		
8. Give the symbol of and the number of electrons in a neutral atom of: Uranium lodine Boron Xenon		Mercury	
Uranium Iodine Boron Xenon Chlorine 9. Give the symbol of and the number of neutrons in one atom of: (Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141 Bismuth-211 Carbon-13 Hydrogen-3 Fluorine-20 Magnesium-25 Europium-157 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons	Krypton	Helium	
Uranium Iodine Boron Xenon Chlorine 9. Give the symbol of and the number of neutrons in one atom of: (Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141 Bismuth-211 Carbon-13 Hydrogen-3 Fluorine-20 Magnesium-25 Europium-157 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons	8. Give the symbol of and the number of electrons in a neuti	ral atom of	
Boron	•		
Chlorine 9. Give the symbol of and the number of neutrons in one atom of: (Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141			
9. Give the symbol of and the number of neutrons in one atom of: (Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141 Bismuth-211		Action	
(Mass numbers are ALWAYS whole numbersshow your calculations) Barium-141	· · · · · · · · · · · · · · · · · · ·		
Barium-141 Bismuth-211 Hydrogen-3 Hydrogen-20 Magnesium-25 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons d. 20 protons	9. Give the symbol of and the number of neutrons in one atom	om of:	
Barium-141 Bismuth-211 Hydrogen-3 Hydrogen-20 Magnesium-25 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons d. 20 protons			
Carbon-13 Hydrogen-3 Hydrogen-3 Hydrogen-3 Magnesium-25 Mercury-199 Hercury-199			
Fluorine-20 Magnesium-25 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons			
Europium-157 Mercury-199 10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons	Carbon-13	Hydrogen-3	
10. Name the element which has the following numbers of particles: a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons			
a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons	Europium-157	Mercury-199	
a. 26 electrons, 29 neutrons, 26 protons b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons	10. Name the element which has the following numbers of r	narticles:	
b. 53 protons, 74 neutrons c. 2 electrons (neutral atoms) d. 20 protons			
c. 2 electrons (neutral atoms) d. 20 protons			
d. 20 protons	b. 53 protons, 74 neutrons		
	c. 2 electrons (neutral atoms)		
. 06 destruct 425 en trans 02 entres	d. 20 protons		
e. 86 electrons, 125 neutrons, 82 protons	e. 86 electrons, 125 neutrons, 82 protons	·	
f. 0 neutrons	f. 0 neutrons		

ALWAYS determine what the element is? (Yes/No) -
-

12. Fill in the missing items in the table below.

NOTE: Assume all atoms are neutral in charge.

Name	Symbol	Z(atomic #)	A(mass #)	# protons	# electrons	# neutrons	Isotope Symbol
a.	Na					12	·
b33		17					
c. Potassium-40							
d.	Р					14	
e. iron-54							
f.				53			
g. silver					47	60	
h81		36					
i.	W					101	
j.		29					
k115				49			
I.				79		120	
m31					16		