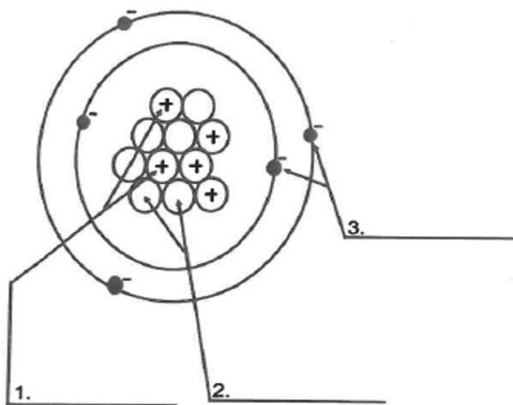


Atomic Structure Worksheet (1-15)

1. Label the 3 parts of the atom below.



4. What type of charge does a proton have?

5. What type of charge does a neutron have?

6. What type of charge does an electron have?

7. Which 2 sub-atomic particles are in the nucleus?

8. If an atom has 35 protons in the nucleus, how many electrons will it have orbiting the nucleus?

9. What is the atomic number of the atom in the diagram above?

10. What is the atomic mass of the atom in the diagram above?

11. How many protons are in the nucleus of an atom with an atomic number of 15?

12. How many electrons are in the nucleus of an atom with an atomic number of 20?!?

13. How many neutrons are in the nucleus of an atom with an atomic number of 25? (use the Periodic Table for the mass)

14. What is the mass number of an atom with 3 protons, 4 neutrons, and 3 electrons?

15. How many neutrons are in the nucleus of an atom that has an atomic mass of 36 and an atomic number of 25?

The Atoms Family
Atomic Math Challenge

8
O
Oxygen
15.999

← _____

← _____

← _____

← _____

Atomic number equals
the number of

_____ or _____

Atomic mass equals
the number of

_____ + _____

8
O

15.999

Atomic # = _____

Atomic Mass = _____

of Protons = _____

of Neutrons = _____

of Electrons = _____

30

Zinc
65.39

Atomic # = _____

Atomic Mass = _____

of Protons = _____

of Neutrons = _____

of Electrons = _____

3
Li

6.941

Atomic # = _____

Atomic Mass = _____

of Protons = _____

of Neutrons = _____

of Electrons = _____

14

Silicon
28.086

Atomic # = _____

Atomic Mass = _____

of Protons = _____

of Neutrons = _____

of Electrons = _____

5
B

10.81

Atomic # = _____

Atomic Mass = _____

of Protons = _____

of Neutrons = _____

of Electrons = _____

35

Bromine
79.904

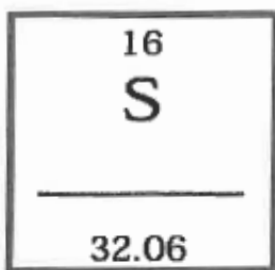
Atomic # = _____

Atomic Mass = _____

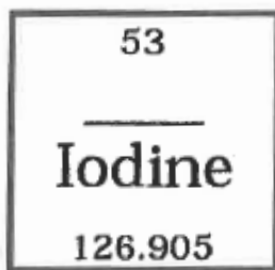
of Protons = _____

of Neutrons = _____

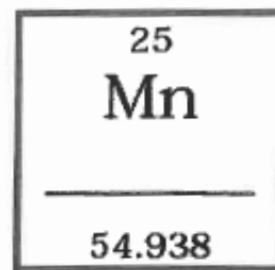
of Electrons = _____



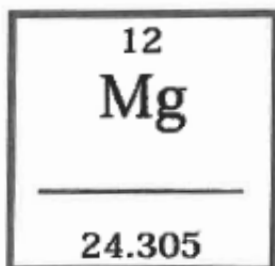
Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



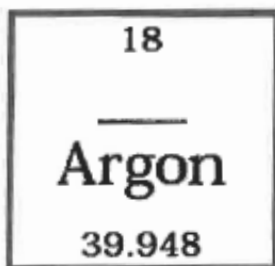
Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



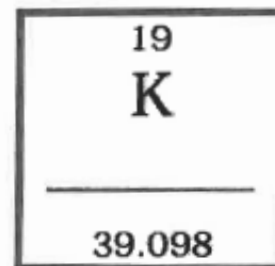
Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



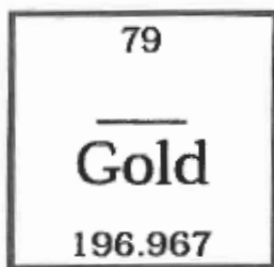
Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



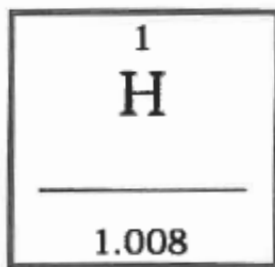
Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



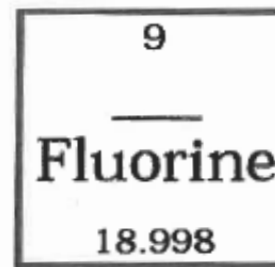
Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____



Atomic # = _____
 Atomic Mass = _____
 # of Protons = _____
 # of Neutrons = _____
 # of Electrons = _____

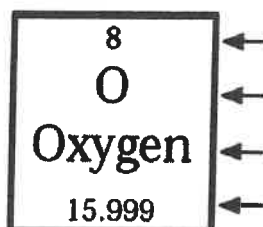
Protons, Neutrons, and Electrons Practice Worksheet

Calculating the number of each particle in an atom:

Protons = Atomic Number

Electrons = Protons

Neutrons = Atomic Mass – Atomic Number OR Big # - Small



Use the periodic table to find the numbers of protons, neutrons, and electrons for atoms of the following elements.

Name of Element	Element Symbol	Mass Number	Atomic Number	Protons	Neutrons	Electrons
Boron	B	11	5	5	6	5
Sodium		23	11			
	Y	89				39
Copper			29		35	
	Tc	98		43		
	Pb	207				
Thallium		204	81			
	H				0	
Carbon		12				
	N			7		
	Ba					56
Calcium						
	Si					14
Argon			18			
	Mg			12		12