

ATOMIC STRUCTURE

1. Using a periodic table, complete the missing information in the table below:

Atomic symbol	Atomic number	Protons	Neutrons	Electrons	Atomic mass	Charge
Pb		82				+2
		34			79	0
	24			21		
			10	9		0
	41			35	93	
P	15					-3
Rb					85	+1
		46			106	0
	76		114	72		
	19				39	0
Mo				36	96	
		106		106	265	
	87				223	0
Hg				78		
				54	131	0

2. Classify the following as either elements, compounds, homogeneous mixtures (solutions) or heterogeneous mixtures:

a) copper (II) sulfate _____

b) Kool Aid _____

c) wood _____

d) plastic _____

e) lined paper _____

3. Calculate the atomic mass for each element given the natural abundances and the mass numbers of the isotopes. Show ALL set up and work.

a) 93.12 % of ^{39}K 6.88 % of ^{41}K

b) 80.0% of ^{70}X 12.25% of ^{69}X 7.75% of ^{68}X