

Mater and Atomic Theory

Walk Around Practice Handout

name _____

1-6 Name the six phase changes...

Solid to gas	Liquid to gas	Gas to solid
Gas to liquid	Solid to liquid	Liquid to solid

7		
8		
9		
10		
11 how to separate these mixtures, what processes could you use?	Brass metal (solid Cu + Zn) Salty Water Sugar Water Iron filings & Sand Nickel coins (solid Cu + Ni) Water & liquid ethanol Sand & water	

How many electrons are...

22. in an atom of STRONTIUM? _____

23. in an atom of PHOSPHOROUS? _____

24. in one molecule of H₂O _____

25. in one molecule of F₂ _____

26. in the 4th orbital of an atom of NIOBIUM? _____

27. in the 3rd OR 4th shell of TIN? _____

28. able to fit into the second orbital of any atom? _____

How many protons, neutrons and electrons are in...

29. the atom Pb-207? _____ protons, _____ neutrons, _____ electrons

30. the isotope U-235? _____ protons, _____ neutrons, _____ electrons

31. Calculate the average weighted Atomic Mass of the element "Z" using this data table. SF, and units count. SHOW WORK

Isotope	Mass in amu	Proportion found in nature
Z-192	191.88	14.55%
Z-195	194.85	83.84%
Z-196	195.94	1.61%