Here are some practice problems for the current material dealing with molar masses. As an extra challenge, could anyone identify the substances below?

Calculate the formula masses for the compounds below.

a)	H_3PO_4	b)	C_4H_{10}	c)	$Co(NO_3)_2$
	98 amu		58 amu		183 amu
d)	$FeCL_3$	e)	$C_{12}H_{22}O_{11}$	f)	$Al_2(SO_4)_3$
	161 amu		342 amu		342 amu

Calculate molar masses for the compounds below.

a)	H_2O	b)	H_2SO_4	c)	$C_6H_{12}O_6$
	18 g/mol		98 g/mol		180 g/mol
d)	$C_7H_8N_4O_2$	e)	$(Na)C_{11}H_{18}N_2O_3$	f)	$(C_5H_5N)_4Cu(NCS)_6$
	180 g/mol		249 g/mol		728 g/mol

Calculate the mass of the following compounds.

a)	1.00 mol NaCl	b)	2.00 mol $MgBr_2$	c)	0.50 mol CCl_4
	58 g		368 g		76 g
d)	3.60 mol NaOH	e)	0.710 mol $Ca(CN)_2$	f)	1.82 mol $BaSO_4$
	144 g		65.32 g		424.06 g

Calculate the number of moles of the following compounds.

a)	88 g CO_2	b)	198 g $C_2H_{12}O_6$	c)	65.25 g LiBr
	2.00 moles		1.5 moles		0.75 moles
a)	249g NaOH	b)	878g $NaAlSi_3O_8$	c)	7,327g Cu_2FeSnS_4
	6.225 moles		3.35 moles		17.00 moles

Classify the following bonds as ionic, polar covalent, or non-polar covalent.

a)	F – F	b)	Si – O	c)	Na – Cl
	non-polar covalent		ionic		ionic
d)	H – C	e)	C – C	f)	O – H
	polar covalent		non-polar covalent		polar covalent
g)	P – O	h)	Fe – Ni	i)	N – N
	polar covalent		ionic		non-polar covalent

Draw Lewis Dot Structures for the molecules below. You will have to see me about the answers for these.

a)	HF	b)	NH_3	c)	$CHCl_3$
d)	O_2	e)	H_2S	f)	SF_6