The Mole Worksheet

1. Find the Molar Mass of the following compounds:

Carbon	$Au_2(SO_4)_3$	FeS
Fe_2O_3 (rust)	$Ni(H_2PO_4)_3$	H_2S
Nitrogen Gas	CS_2	CH_3Br (methyl bromide)
KNO_3	Oxygen Gas	Cl_2
Carbon Monoxide	Argon Gas	H_2O
Iridium	$NH_4C_2H_3O_2$	$Al_2(SO_4)_3$

2. What is the mass in grams of 5.6moles of carbon?
3. What is the mass in grams of 0.645moles of rust?
4. How many molecules are in 0.125moles of nitrogen gas?
5. How many formula units are in 2.59moles of potassium nitrate?
6. How many moles are in 44.9g of iron (II) sulfide?
7. How many moles are in 0.001g of carbon monoxide?
8. How many formula units are in 19.76g of gold (III) sulfate?
9. How many molecules are in 256g of carbon disulfide?
10. How many moles are in 15.9L of oxygen gas at STP?

d) KNO_3

16) What is the mass of 6.02×10^{23} molecules of H_2CO_3?