Calculate how many moles are in the following masses:
1) 25 g of NaCl
2) 125 g of H_2SO_4
3) 100 g of $KMnO_4$
4) 74 g of KCl
5) 35 g of $CuSO_4(H_2O)_5$

Calculate the mass (in grams) of the following number of moles:
6) 2.5 mol of NaCl
7) 0.5 mole of H_2SO_4
8) 1.7 mol of $KMnO_4$
9) 0.25 mol of KCl
10) 3.2 mol of $CuSO_4(H_2O)_5$

Calculate how many atoms are in the following number of moles. Put your answer in scientific notation:
11) 2 moles
12) 1.5 moles
13) 0.75 moles
14) 15 moles
15) 0.35 moles

Calculate how many moles are in the following number of atoms.
16) 6.02×10^{23}
17) 1.204×10^{24}
18) 1.5×10^{20}
19) 3.4×10^{26}
20) 7.5×10^{19}

Calculate how many moles are in the following number of liters.
21) 1.5 liters
22) 10.9 liters
23) 4,560 liters
24) 8.3×10^{13} liters
25) 7.5×10^{-4} liters

Calculate how many atoms are in the following number of liters.
26) 3.5 liters
27) 148 liters
28) 0.75 liters

Calculate how many liters the following number of atoms would take up.
29) 4.6×10^{35} atoms
30) 2×10^{12} atoms
31) 7.65×10^{95} atoms

Calculate the mass of the following.
32) 35 liters of Cl_2 gas
33) 0.5 liters of CO_2 gas

Calculate the volume of the following.
34) 150 grams of Br2 gas
35) 40 kg of water vapor gas