CHM 1142

Homework Set 4

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1)	How many grams of methanol (CH_4O) are in 0.20 moles of methanol?
2)	How many moles of benzene (C_6H_6) are in 43 g of benzene?
3)	What mass of NaCl contains as many moles as 5.0 g of KBr?
4)	How many molecules are in 6.0 g of PCl ₃ ?
5)	What is the mass in grams of a single atom of lead?

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6)	What mass of propane (C_3H_8) contains 2.2 grams of C?
7)	How many grams are in 2.0 moles of KCl?
8)	How many moles are in 2.0 grams of KCl?
9)	What mass in grams of sodium atoms contains 3 \times 10 ¹⁸ atoms?
10)	What is the mass in grams of a single fluorine atom?
11)	How many moles of Si has as many Si atoms as the number of atoms in 4.0 g of Ca?
12)	How many atoms are in 3.2 g of methanol (CH_4O)