2-Step Mole Conversion Problems

1. Find the number of particles in 37 grams of C(SO3)2?
2. How many liters are in 5.87x1023 molecules of Ba(OH)2?
3. How many grams are in 7.23 x 1022 molecules of isopropanol (C3H8O)?
4. How many atoms of Magnesium are in 12 liters of Mg?
5. How many ions are in .023 grams of CrO4?
6. What is the mass of 9.50 x 1025 particles of Iron (II) Chloride?
7. How many liters of CO2 are in 377 grams of CO2?
8. How many grams are in 9.08 x 1024 ions of C2H3O2?
9. How many liters are in 9,987 grams of (NH4)3C6H5O7  ?
10. How many grams are in 2.22 x 1022 molecules of Ga2(CO3)3?
11. How many atoms are in 439 grams of Uranium?
12. How many molecules are in 90,000 liters of Ga2(Cr2O7)3?