Mole Conversion Practice Problems

1. How many atoms are in 0.250 mol of silver? \_\_\_\_\_\_\_\_\_\_\_\_\_ atoms
2. How many moles are in 3.25X1020 atoms of Pb? \_\_\_\_\_\_\_\_\_\_moles
3. Convert 1.51 x 1015 atoms Si to mol Si. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mol
4. How many molecules are in 1.35 mol CS2? \_\_\_\_\_\_\_\_\_\_\_\_molecules
5. How many moles are in 1.25 X 1015 molecules of CO2? \_\_\_\_\_\_\_ mol
6. What is the mass of 5.22 mol He? \_\_\_\_\_\_\_\_\_\_\_\_g
7. Convert 3.50 mol Li to grams Li. \_\_\_\_\_\_\_\_\_\_\_\_g

Divide by 6.02 x 1023

Multiply by 6.02 x 1023

1. What’s the mass (grams) of 1.33 x 10 22 mol of Sb? \_\_\_\_\_\_\_\_\_\_\_g
2. What’s the mass (grams) of 4.22 x 10 15 atoms of U? \_\_\_\_\_\_\_\_\_\_\_g
3. How many atoms are in 25.8 g Hg? \_\_\_\_\_\_\_\_\_\_\_\_atoms
4. What’s the molar mass of nitric acid (HNO3) \_\_\_\_\_\_\_\_\_\_\_\_g/mol
5. What’s the molar mass of ascorbic acid (C6H8O6) \_\_\_\_\_\_\_\_\_\_g/mol
6. How many moles are in 100.0g of dinitrogen oxide (N2O)?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_mols

1. How many atoms are in 3.50 g of gold? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_g