

The Mole and Avogadro constant/number

How many atoms are there in:

1. 20 g of neon
2. 24 g of magnesium
3. 40 g of calcium
4. 84 g of krypton
5. 8 g of helium
6. 127 g of copper
7. 20 g of argon
8. 5.9 g of nickel

How many molecules are there in:

1. 32 g of oxygen gas, O_2
2. 28 g of nitrogen gas, N_2
3. 17 g of ammonia gas, NH_3
4. 9 g of water
5. 22 g of carbon dioxide
6. 32 g of methane, CH_4
7. 16 g of bromine liquid, Br_2
8. 192 g of sulfur dioxide gas SO_2

Challenge questions:

1. How many ATOMS are there in 32 g of oxygen gas?
2. How many IONS are there in 58.5 g of sodium chloride?

6.02×10^{23}

