

MORE CONVERSIONS

1. Calculate the amount (moles) in:
 - a) 25.0 g of oxygen gas
 - b) 43.8 g of sodium nitrate
 - c) 0.005 g of potassium bicarbonate
 - d) 950 g of lithium sulphate
 - e) 2.2 kg of ammonium phosphate
 - f) 0.545 g of auric carbonate
 - g) 3.32 g of potassium perchlorate
 - h) 0.05 mg of iron(II) nitride

2. Calculate the mass in:
 - a) 1.25 mol of hydrogen oxide
 - b) 4.3 mol of hydrogen peroxide
 - c) 0.022 mol of arsenic pentoxide
 - d) 2.8 mol of carbon dioxide
 - e) 99.0 mol of nitrogen gas
 - f) 33.8 mol of neon gas
 - g) 0.1 mmol of potassium bisulphite
 - h) 2.2 kmol of lithium hydride

3. Calculate the number of molecules in:
 - a) 2.50 mol of uranium hexafluoride
 - b) 2.50 mol of ammonium nitrate
 - c) 2.50 mol of cupric bromide
 - d) 2.50 mol of stannous chlorate
 - e) 2.50 mol of tungsten(IV) oxide
 - f) 2.50 mol of hydrogen chloride

4. Calculate the number of atoms in:
 - a) 2.50 mol of uranium hexafluoride
 - b) 2.50 mol of ammonium nitrate
 - c) 2.50 mol of cupric bromide
 - d) 2.50 mol of stannous chlorate
 - e) 2.50 mol of tungsten(IV) oxide
 - f) 2.50 mol of hydrogen chloride

5. Calculate the number of molecules in:
 - a) 3.56 g of lithium oxide
 - b) 7.89 g of magnesium hypochlorite
 - c) 89.0 g of sulphur(IV) oxide
 - d) 0.050 kg of cupric sulphate pentahydrate
 - e) 21.0 g cobaltous chloride hexahydrate

6. Calculate the mass in grams of:
 - a) 3.50×10^{22} molec of potassium nitrate
 - b) 8.45×10^{21} molec of silver periodate
 - c) 1.23×10^{24} molec of sodium thiosulphate pentahydrate ($\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$)
 - d) 5.45×10^{25} molec of sodium metabisulphite ($\text{Na}_2\text{S}_2\text{O}_5$)
 - e) 1.11×10^{22} molec of sodium persulphate ($\text{Na}_2\text{S}_2\text{O}_8$)