Combined science - Chemistry - Key Stage 4

Quantitative Chemistry

Moles and Avogadro’s constant - Higher

Mrs. Begum

Questions

1. Calculate the mass of:
   a. 5 moles of Cl_2
   b. 2 moles of Al_2O_3
   c. 0.1 moles of Ag
   d. 0.002 moles of $(NH_4)_2SO_4$

A_r:

H = 1

Cl = 35.5

S = 32

Al = 27

O = 16

N = 14

Ag = 108

Questions

2. Convert these values into grams:
    a. 5 kg
    b. 0.2 kg
    c. 500 mg
    d. 20 mg

Questions

Moles = Mass / Mr

3. Calculate the number of moles in:
   a. 72 g of Mg
   b. 39 g of $Al(OH)_3$
   c. 4 kg of CuO
   d. 100 mg of NaCl

A_r:

H = 1

Cl = 35.5

Al = 27

O = 16

Mg = 24