Conversion Factor Introduction

1. Find the mass (in g) of 34.5 kg of H_2O

34.5 kg H_2O x _____ =

2. Find the volume (in L) of 284 mL of water

284 mL H_2O x _____ =

3. Find the mass (in g) of 0.00500 mol of gold

0.00500 mol Au x _____ =

4. Find the amount (in mol) of 35.9 g of scandium

35.9 g Sc x _____ =

5. Find the number of atoms in 0.00500 mol of gold

0.00500 mol Au x _____ =

6. Find the amount (in mol) of 4.5×10^{22} molec of water

4.52×10^{22} molec H_2O x _____ =

7. Find the mass (in g) of 0.422 mol of glucose

0.422 mol $C_6H_{12}O_6$ x _____ =

8. Find the amount (in mol) of 25.4 g of H_2SO_4

25.4 g H_2SO_4 x _____ =

9. Find the number of molecules in 300 g of O_2

300 g O_2 x _____ x _____ =

10. Find the amount (in mol) of 250 mL of water (1 mL of water has a mass of 1 g)

250 mL H_2O x _____ x _____ =

11. Find the mass (in g) of 1 x 10^{24} molec of CO_2

1.00 x 10^{24} molec CO_2 x _____ x _____ =

12. Find the number of molecules in 3.00 g of CH_2O

3.00 g CH_2O x _____ x _____ =

13. Find the mass (in g) of 1.27 x 10^{23} atoms of Cu

1.27 x 10^{23} atoms Cu x _____ x _____ =

14. Find the number of oxygen molecules that could be extracted by electroylsis from 45 mL of pure water