1. When a substance was heated, CaCO3, H2O and CO2 were produced. The substance is

Calcium hydrogen carbonate

1. What is the molar mass of CO2 ?

44 g/mol

1. Which of the following does not contain same number of molecules?

1 mole of nitrogen gas

1. What acid reacts with sodium carbonate to produce sodium nitrate?

Hydrochloric acid

1. Which of the following has a molar mass of 30gmol-1

NO

1. When 2 moles of copper carbonate reacts with excess acid, how many moles of CO2 are produced?

2 moles

1. what are the coefficients for the following reaction?

H2O2 --------> H2O + O2.

2,2,1

1. The % of mass of carbon in methane is

75%

1. Sodium carbonate decompose by heat to produce:

No reaction

1. Which of the following is an analogy of a catalyst?

Adding MnO2 to H2O2

1. 2 moles of methane are burnt in presence of oxygen. How many moles of gas are produced?

6 moles

1. The molar mass of acetic acid is:

60 g/mol

1. What is the number of moles of HCl in 2.5L of 4M HCl?

10 moles

1. What is the relative atomic mass of Aluminium?

27

1. Calculate the number of moles in 35g of SO2

0.546 moles

1. The number of particles in 3 moles of Zinc nitrate.

1.81 x 1023

1. How many moles of oxygen atoms in 5 moles of CO2?

10

1. What is the mass of 3.5 moles of NH3?

59.5g

1. 3 moles of Mg(OH)2 reacted with 3 moles of HCl. What is the mass of MgCl2?

142.5g

1. What acid is reacting with zinc metal to produce zinc carbonate?

H2CO3

1. What is the relative molecular mass of glucose?

180

1. Which can be used as a standard for relative atomic mass?

Any element.

1. Find the concentration of a KCl solution of 3.6 moles of KCl dissolved in 560mL of solvent?

6.43 mol/L

1. What is the the number of moles of hydrogen atoms in 3.7 moles of CuSO4.5H2O?

37 moles

1. Which of the following does not have the same number of moles of hydrogen atoms?

2 moles NiSO4.7H2O

1. Determine the formula of Ba(OH)2 if n(Ba(OH)2) is 3.5 and n(H2O) is 28.

Ba(OH)2 .8H2O

1. What is the formula of hydrated Na2CO3 if you have 212g of Na2CO3 and 3.6kg of H2O?

Na2CO3.10H2O

1. 6.5g of Nitrogen gas reacts with 5.6g of Hydrogen gas. what is the mass of ammonia produced?

7.82g

1. How many particles of Fe2O3 are there in 5.2g of the substance?

1.96 x 1022

1. What are the coefficients of this chemical reaction? C2H2 + O2 --------> CO2 + H20

2,5,4,2