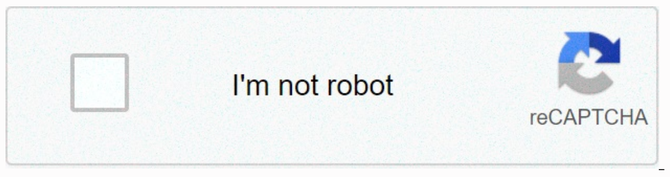

Continue

12 stoichiometry practice problems answers

Balance the following chemical reactions: a. 2 CO + O2 2 CO2 b. 2 KNO3 2 KNO2 + O2 c. 2 O3 3 O2 d. NH4NO3 N2O + 2 H2O e. 4 CH3NH2 + 9 O2 4 CO2 + 10 H2O + 2 N2 f. Cr(OH)3 + 3 HClO4 Cr(ClO4)3 + 3 H2O Write balanced chemical equations of each reaction: a. Calcium carbide (CaC2) reacts with water to form calcium hydroxide (Ca(OH)2) and acetylene gas (C2H2). CaC2 + 2 H2O C2H2 + Ca(OH)2 b. When potassium chlorate (KClO3) heats up, it breaks down to form KCl and oxygen gas (O2). 2 KClO3 2 KCl + 3 O2 c. C6H6 kombuster in air. 2 C6H6 + 15 O2 12 CO2 + 6 H2O d. C5H12O is in the air. 2 C5H12O + 15 O2 10 CO2 + 12 H2O Given the following reaction: Na2S2O3 + AgBr NaBr + Na3[Ag(S2O3)2] a. How many moles of Na2S2O3 are needed to react completely with 42.7 g of AgBr? 0.455 mol Na2S2O3 b. What is the mass of NaBr that will be produced from 42.7 g AgBr? 23.4 g NaBr From the reaction: B2H6 + O2 HBO2 + H2O a. What mass O2 will be needed to burn 36.1 g B2H6? 125 g O2 b. How many moles of water are produced from 19.2 g of B2H6? 1.39 mol H2O Calculate the mass (in kg) of water produced from the combustion of 3.8 l of gasoline (C8H18). The density of gasoline is 0.79 g / ml. 4,3 kg H2O A mole of aspartame (C14H18N2O5) reacts with two moles of water to produce a mole of aspartic acid (C4H7NO4), a mole methanol (CH3OH) and a mole phenylalane. A. What is the molecular formula for phenylalanine? C9H11NO2 b. What mass phenylalanine is produced from 378 g of aspartame? 212 g phenylalanine KO2 is used in a breathing apparatus closed system. It removes carbon dioxide and water from exhaled air. The reaction for water removal is: KO2 + H2O O2 + KOH. Koh produced is used to remove carbon dioxide by the following reaction: KOH + CO2 KHCO3. A. What mass ko2 produces 235 g O2? 696 g KO2 b. What mass of CO2 can be removed with 123 g KO2? 76.1g CO2 Stoichiometry (molar conditions, mole-mole/ mole-mass / lots of problems) Percentage return Stoichiometry with molarity Excess and limit reagent If you see this message, it means that we are having trouble loading external resources on our website. If you are behind a Web filter, make sure that the domains *.kastatic.org and *.kasandbox.org are revoked.