|  |  |
| --- | --- |
| **Limiting & Excess** | Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

1. What mass of CS2 is produced when 17.5 g of C are reacted with 39.5 g of SO2 according to the equation

C + SO2 🡪 CS2 + CO

What mass of the excess reactant will be left over?

1. What mass of NO is produced when 87.0 g of Cu are reacted with 225 g of HNO3 according to the equation

Cu + HNO3 🡪 Cu(NO3)2 + NO + H2O

What mass of the excess reactant will be left over?

1. What mass of P4 is produced when 41.5 g of Ca3(PO4)2, 26.5 g of SiO2 and 7.80g of C are reacted according to the equation

Ca3(PO4)2 + SiO2 + C 🡪 P4 + CaSiO3 + CO

How many grams of each excess reactant will remain unreacted?

1. What mass of Br2 is produced when 25.0 g of K2Cr2O7, 55.0 g of KBr and 60.0 g of H2SO4 are reacted according to the equation

K2Cr2O7 + KBr + H2SO4 🡪 K2SO4 + Cr2(SO4)3 + Br2 + H2O

How many grams of each excess reactant will remain unreacted?

1. What volume of CO2 can be made when 0.0250 L of C5H12 (density = 626.0 g/L) is reacted with 40.0 L of O2 at STP, according to the equation

C5H12 + O2 🡪 CO2 + H2O