

Name: _____

Gram to Gram Problems

① 16. For the reaction $C + 2H_2 \rightarrow CH_4$, how many grams of hydrogen are required to produce 145 grams of methane, CH_4 ?
H₂

② 17. For the reaction $2HNO_3 + Mg(OH)_2 \rightarrow Mg(NO_3)_2 + 2H_2O$, how many grams of magnesium nitrate are produced from 981 grams of nitric acid, HNO_3 ?
Mg(NO₃)₂

③ 18. For the reaction $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$, how many grams of water are produced from the combustion of 42.0 g of methane?
H₂O
CH₄

④ 19. For the reaction $Cl_2 + 2KBr \rightarrow 2KCl + Br_2$, how many grams of potassium chloride are produced from 113 g of chlorine?
KCl
Cl₂

⑤ 20. For the reaction $2Zn + O_2 \rightarrow 2ZnO$, how many grams of zinc oxide can be produced from 2.75 g of oxygen?
ZnO
O₂