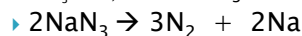


## Stoichiometry Part 2

Mr. Sudbury

### Practice Problems

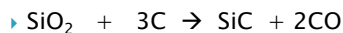
- When sodium azide ( $\text{NaN}_3$ ) is activated in an automobile airbag, nitrogen gas and sodium are produced. If 0.500 mol  $\text{NaN}_3$  react, what mass in grams of nitrogen would result?



Molar Masses	
$\text{NaN}_3$	52.004g
$\text{N}_2$	28.014g
$\text{Na}$	22.990g

### Practice Problems

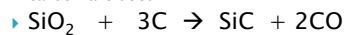
- Carborundum,  $\text{SiC}$ , is a hard substance made by combining silicon dioxide with coke (C). The products are  $\text{SiC}$  and  $\text{CO}$ . What is the mass of  $\text{SiC}$  in grams from the complete reaction of 2.00 mol carbon?



Molar Masses	
$\text{SiO}_2$	60.084g
$\text{SiC}$	40.079g
C	12.011g
$\text{CO}$	28.01g

### Practice Problems

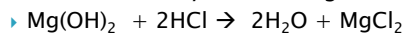
- How many moles of carbon dioxide is formed when 30.0 g of carbon are used?



Molar Masses	
$\text{SiO}_2$	60.084g
$\text{SiC}$	40.079g
C	12.011g
$\text{CO}$	28.01g

### Practice Problems

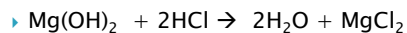
- This equation represents the neutralization of stomach acid by milk of magnesia.



- What is the mass in grams of  $\text{MgCl}_2$  which will be produced if 3.00 mol of  $\text{Mg}(\text{OH})_2$  reacts?

Molar Masses	
$\text{Mg}(\text{OH})_2$	58.319g
HCl	36.461g
$\text{H}_2\text{O}$	18.015g
$\text{MgCl}_2$	95.211g

### Practice Problems



- How many moles of HCl are required to completely react with 13.0 g of  $\text{Mg}(\text{OH})_2$ ?

Molar Masses	
$\text{Mg}(\text{OH})_2$	58.319g
HCl	36.461g
$\text{H}_2\text{O}$	18.015g
$\text{MgCl}_2$	95.211g

The End

