

Name: _____

Period: _____

Seat#: _____

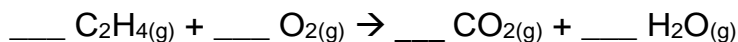
Directions:

- Don't forget! You must show all work and units for conversions, gas laws, dimensional analysis, etc.
- Get an actual answer, including units! Box your answer!
- Some answers are provided at the end of the question. The answers are underlined.

- 1) Calcium carbonate decomposes at high temperatures to form carbon dioxide and calcium oxide. How many grams of calcium carbonate will I need to form 3.45 liters of carbon dioxide if the reaction is done at 1.0atm and 25°C?
14.1 grams



- 2) Ethylene burns in oxygen to form carbon dioxide and water vapor. How many liters of water can be formed if 1.25 liters of ethylene are consumed in this reaction at STP? 2.50 liters



- 3) When chlorine is added to acetylene, 1,1,2,2-tetrachloroethane is formed. How many liters of chlorine will be needed to make 75.0 grams of $\text{C}_2\text{H}_2\text{Cl}_4$ if your container is at 345K and 800mmHg? 24.08 L

