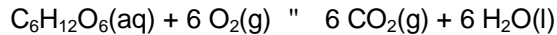




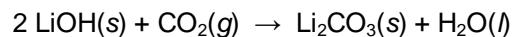
## Gas Laws Worksheet

- 5) The metabolic oxidation of glucose,  $C_6H_{12}O_6$ , in our bodies produces  $CO_2$ , which is expelled from our lungs as a gas:



Calculate the volume of dry  $CO_2$  produced at body temperature ( $37^\circ C$ ) and 0.962 atm when 21.3 grams of glucose are consumed in this reaction.

- 6) Lithium hydroxide is used in spacecraft to recondition the air by absorbing the carbon dioxide exhaled by astronauts. The reaction is:



What volume of carbon dioxide gas at  $24^\circ C$  and 754 mmHg could be absorbed by 325 grams of lithium hydroxide?