## When BBQ Propane Burns in Air

1. Write the balanced chemical equation for the combustion of propane gas, $\mathrm{C}_{3} \mathrm{H}_{8}$, in a BBQ.
2. If you want to burn 0.60 moles of propane, how many moles of oxygen will you require?
3. If your BBQ pumps out 10.5 moles of carbon dioxide gas, what mass of propane did you burn?
4. If you produce 46.00 g of water vapour, how many moles of oxygen did you use?
5. If you burn 50.00 g of propane, how many grams of water vapour will you produce?
6. If 66.00 g of oxygen react, what mass of carbon dioxide will form?
7. If 54.00 g of water vapour is produced, how many molecules of oxygen reacted?
