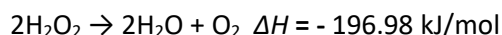
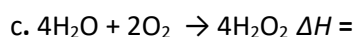
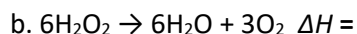
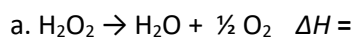


Video worksheet on thermochemical equations.

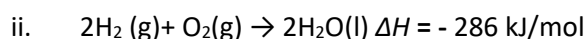
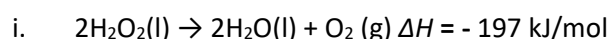
1. Consider the thermochemical equation shown of the decomposition hydrogen peroxide.



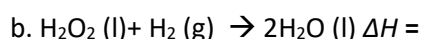
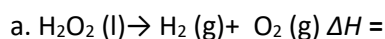
Calculate the ΔH of each equation given below .



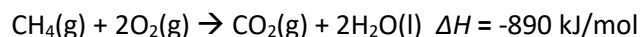
2. Consider the equations given below of the decomposition of hydrogen peroxide and of the formation of liquid water.



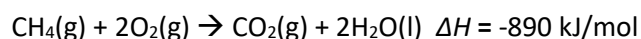
Calculate the ΔH of the equations below .



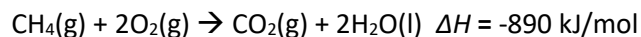
3. What is the amount of energy, in kJ, given out when 4.0 mol of methane gas (CH_4) undergoes complete combustion in excess oxygen according to the equation below?



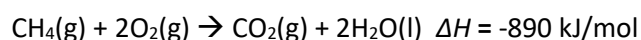
4. What is the amount of CO_2 , in grams, given out when 1550 kJ of energy is released during the combustion of methane in excess oxygen gas according to the equation below?



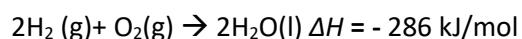
5. What is the amount of energy, in kilojoules, released when 6.40 grams of oxygen reacts with excess methane according to the equation given below?



6. What is the amount of carbon dioxide, in grams, produced if 3.60×10^3 kJ of energy is released from the combustion of methane gas in excess oxygen?



7. . Consider the equation below of the formation of water.



Will the magnitude of the ΔH of the equation below be higher, lower or equal to 286 kJ/mol? Explain

