

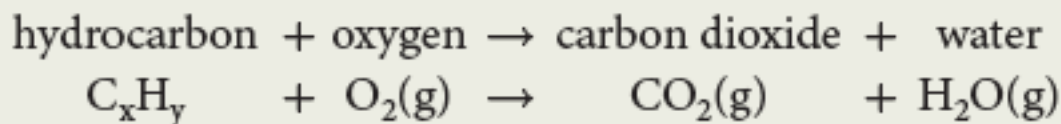
# Combustion Reactions

**combustion reaction**  
the reaction of a substance with oxygen, producing one or more oxides, heat, and light

When a compound “burns” in air it is reacting with the  $O_2$  in air.

**hydrocarbon** a compound that is composed only of the elements carbon and hydrogen

## Complete Combustion:



ex) Methane ( $CH_4$ ) is used in your bunsen burners.

ex) Butane ( $C_4H_{10}$ ) is used in your lighters.

ex) Glucose ( $C_6H_{12}O_6$ ) is the sugar your body uses to produce energy.

ex) A tricky one:  $C_2H_6(g) + O_2(g) \rightarrow CO_2(g) + H_2O(g)$

**Incomplete Combustion:** Results when there isn't enough oxygen present



ex) Write a balanced chemical equation for Hexane ( $C_6H_{14}$ ) undergoing incomplete combustion.

