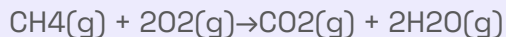




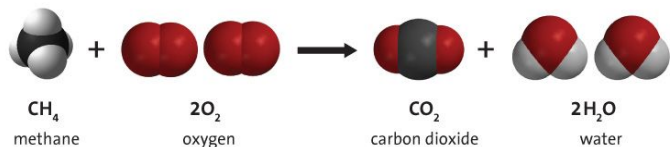
## Chemical Reaction Process

SOURCE

- A chemical equation is an empirical representation of a chemical process.
- A chemical equation can be used to depict the burning of methane.



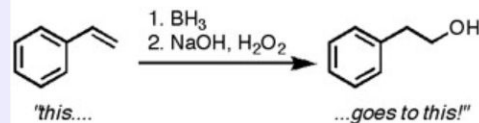
- According to this equation, oxygen and CH<sub>4</sub> combine to generate H<sub>2</sub>O and CO<sub>2</sub>.



## Arrows in A Chemical Equation

SOURCE

- The **direction of the reaction** is shown by an arrow pointing from the reactants to the products.
- Several reactions may occur: elements can create compounds, compounds can form elements, and compounds can join, break apart, or reorganize to generate new compounds.
- A **symbol could be placed above or below the arrow** to denote a specific scenario.
- When the Reaction is heated, the sign "Δ" is frequently used.

1. Forward Arrow *General Purpose, shows action*2. Equilibrium Arrows *Depict a reversible process*