BALANCING COMBUSTION REACTIONS

- Combustion is a reaction with oxygen, often releasing heat and light.
- Combustion of hydrocarbons forms carbon dioxide and water.

Combustion of Hydrocarbons

$$C_2H_6 + O_2 \rightarrow CO_2 + H_2O$$

- Balance carbon and then hydrogen
- Balance oxygen last:
 - If there is an odd number of oxygen in the product, use that number as the coefficient for oxygen.
 - Double all the remaining coefficients
 - Voila!

Combustion of ammonia

Use the same tricks!

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$$NH_3 + O_2 \rightarrow NO + H_2O$$