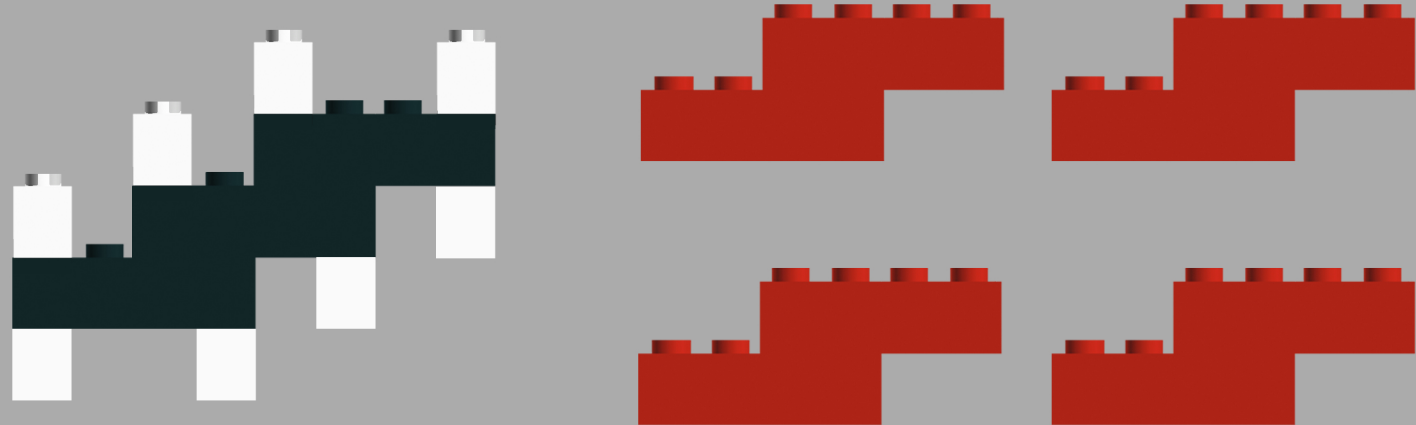


Burning Fuel

Incomplete Combustion

There are fewer oxygen molecules for this reaction.

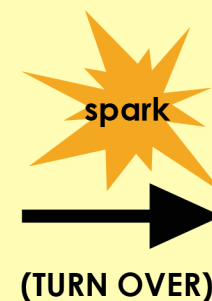
Build the fuel and oxygen molecules with LEGO® bricks. Place them on their pictures.



The image shows two sets of LEGO bricks used to represent molecules. On the left, a propane molecule (C₃H₈) is constructed from three black bricks representing carbon atoms and eight white bricks representing hydrogen atoms. On the right, four oxygen molecules (4 O₂) are constructed from eight red bricks, with two red bricks joined together to form each oxygen molecule.

C_3H_8
(propane)

$4 O_2$
(oxygen)



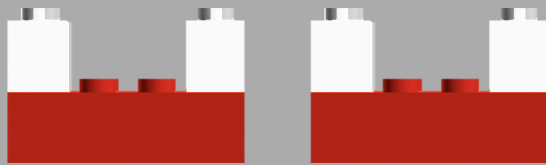
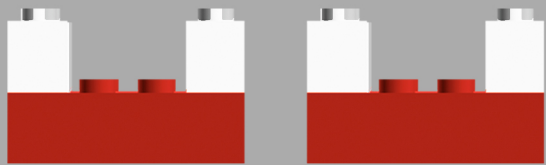
Burning Fuel

Incomplete Combustion

Side 2
Products

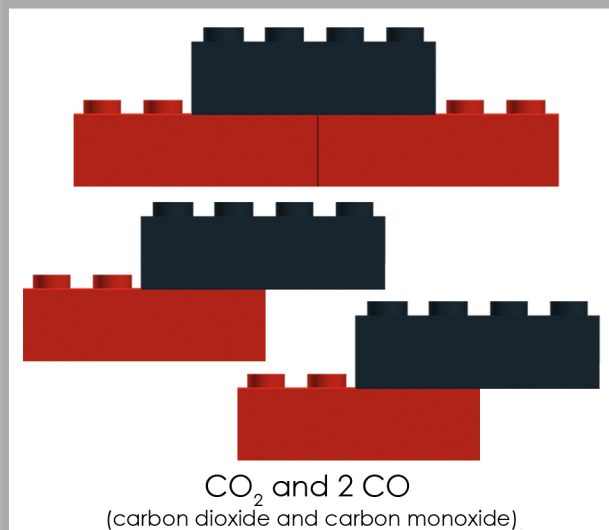
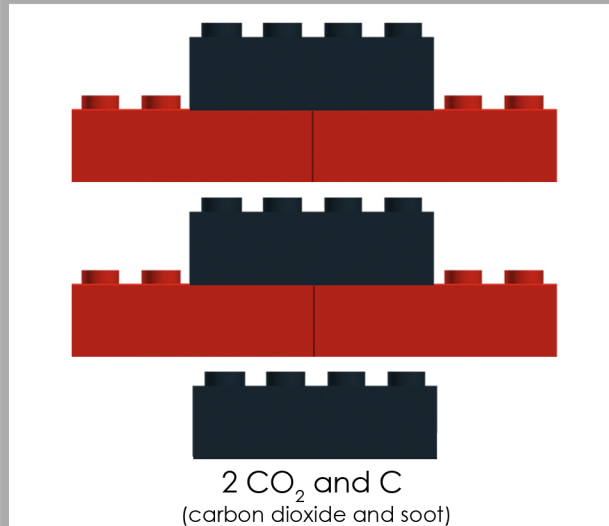
When there is not enough oxygen available, fuel doesn't burn completely, producing not only carbon dioxide and water, but other products. This reaction is called **incomplete combustion**.

- 1 Take apart the fuel and oxygen from Side 1. Make as many water molecules as you can with the same LEGO® bricks.



H_2O
(water)

- 2 Choose one box below and make the molecules with the remaining bricks.



- 3 Incomplete combustion makes **C** (soot) or **CO** (carbon monoxide). Both are air pollutants and are bad for your health.

