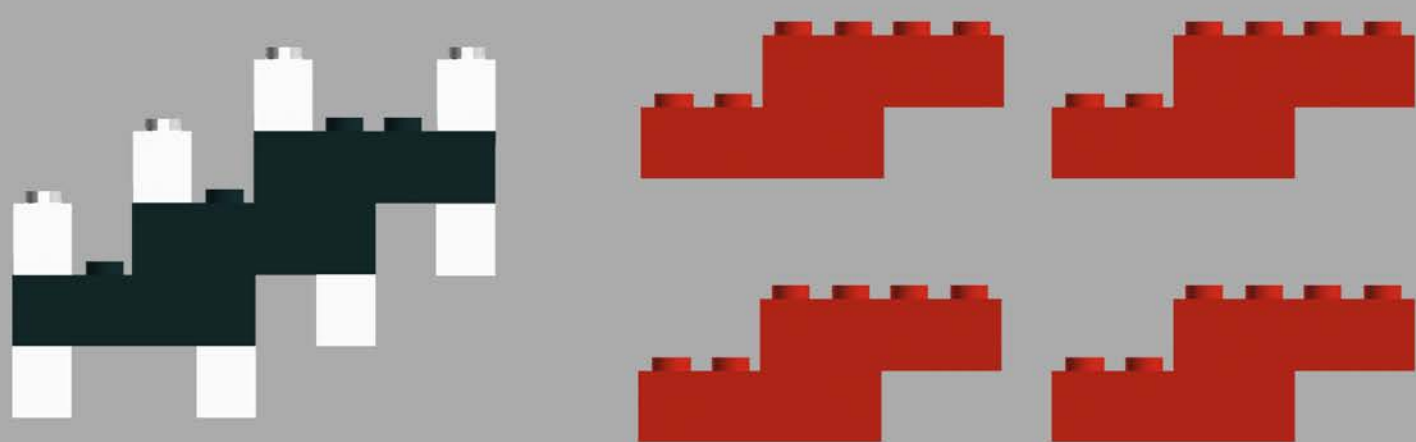


Burning Fuel

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 on a grey background. On the left, a propane molecule (C₃H₈) is built with three black bricks representing carbon atoms and eight white bricks representing hydrogen atoms. On the right, four oxygen molecules (4 O₂) are built with red bricks, each molecule consisting of two red bricks representing oxygen atoms.

C_3H_8
(propane)

$4 O_2$
(oxygen)

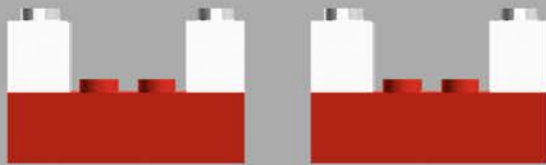
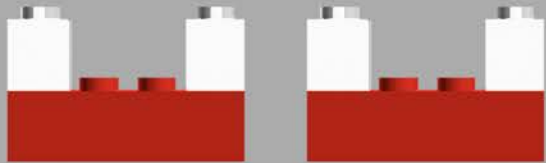
spark
→
(TURN OVER)

Burning Fuel

Incomplete Combustion

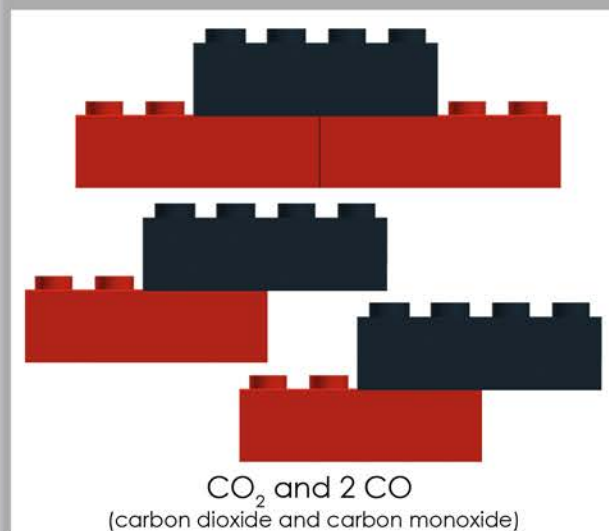
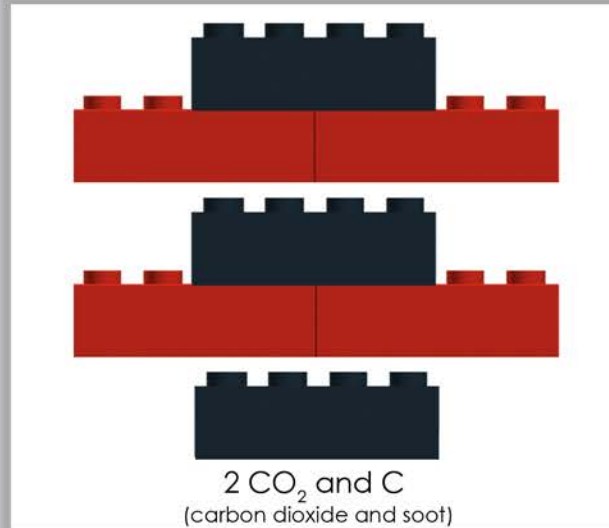
When there is not enough oxygen available, fuel doesn't burn completely, producing not only carbon dioxide and water, but other products. This reaction is called **incomplete combustion**.

- 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.

