

Results:

1. What happened to the substances in the bottle over time?

The organic materials (egg and lettuce) started to rot.

2. What do you think caused the changes in the balloon?

A gas was created and filled the balloon.

Decomposition (rotting, decaying) is the process by which organic substances are broken down into simpler forms of matter. As they rot, plant and animal materials will break down into liquids and gasses. Gasses take up more space than solids and liquids, so as the gasses produced in the rotting process expanded, they inflated the balloon.

3. What could we call the new substance that was formed?

Natural gas! Odourless and colourless, natural gas is made up mainly of methane produced by the rotting of organic (plant and animal) material deep in the Earth's crust.

Checking for Understanding:

What does the lettuce represent?

The lettuce represents plants that die and decay over time to produce natural gas.

What does the egg represent?

The egg represents animals that die and decay over time to produce natural gas.