



Carbon cycle

How carbon is recycled through natural processes and human activities

Starter activity

Keywords

Try to solve these keyword anagrams:-

- Sir Bannock carbon sink
- Snot hypothesis photosynthesis
- Cubist moon combustion
- Meet lions limestone
- Irate prison respiration
- Core mopeds decomposer

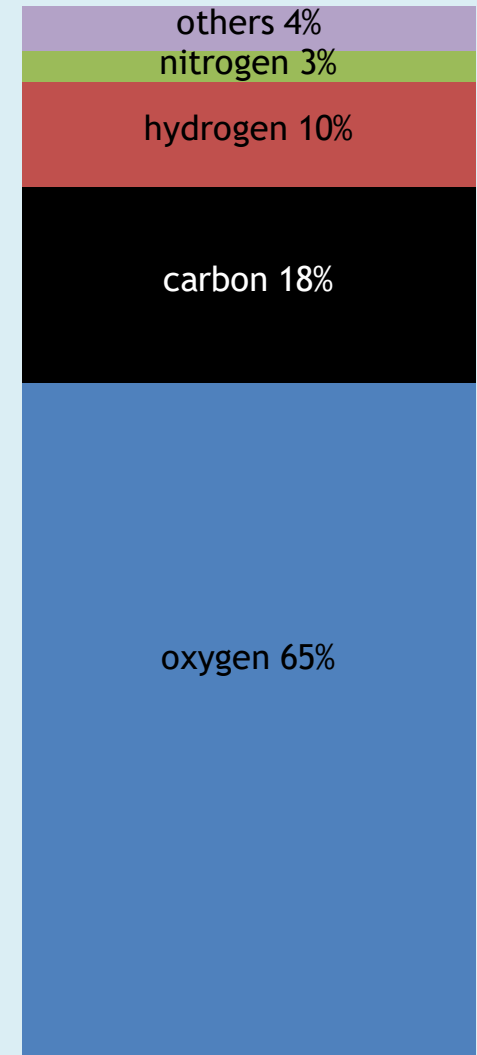


What connects the White Cliffs of Dover with the carbon cycle?

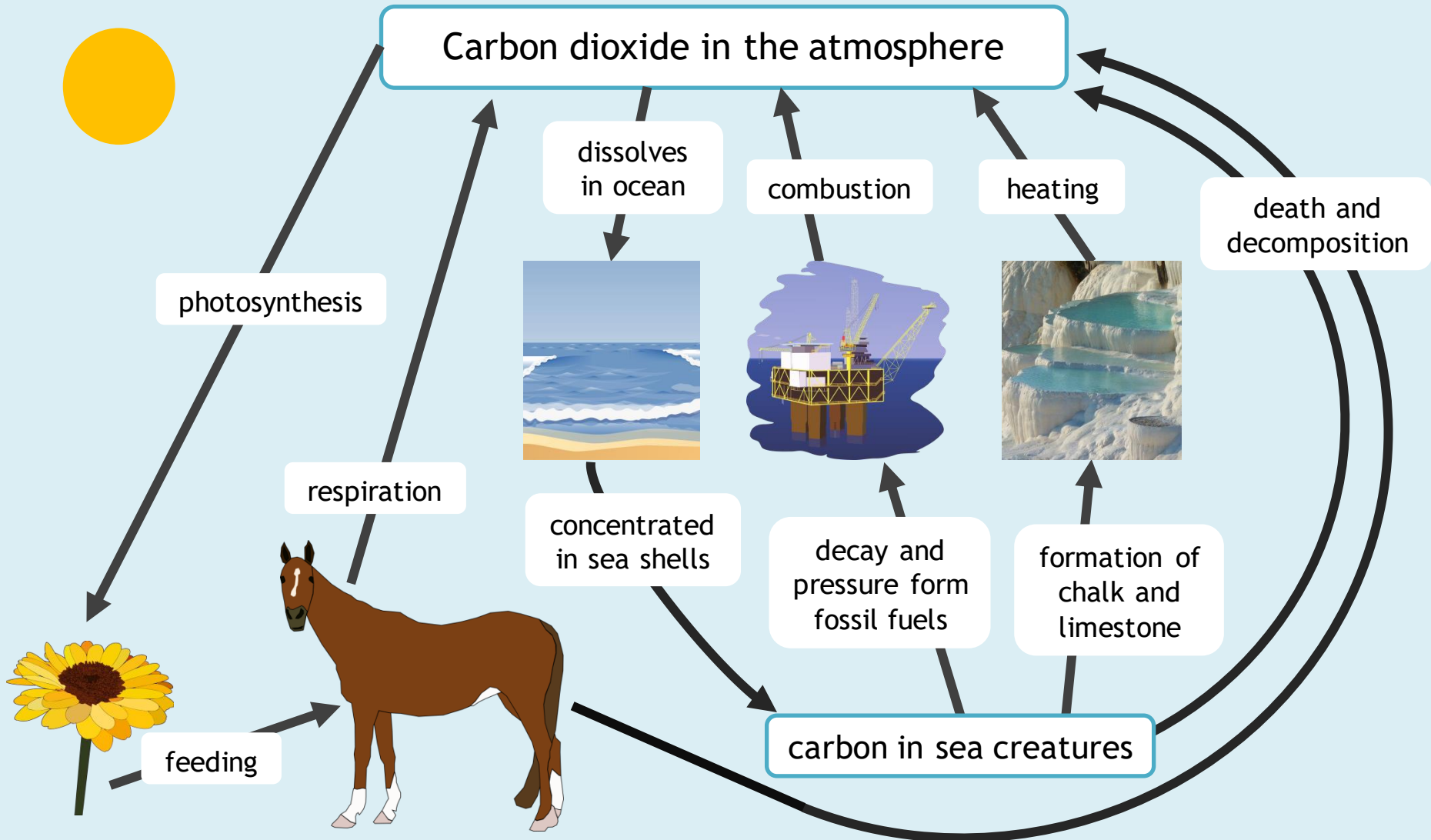
Carbon

All living organisms contain carbon. All of the chemicals that make up living things, like protein, fat and sugar, are made mainly of: -

- *carbon*
- *oxygen*
- *hydrogen*
- *nitrogen*
- *plus small amounts of other elements such as phosphorus, sulfur, calcium and many others.*



Carbon cycle



Things to do

1. Make a poster to show how carbon is recycled in the environment and through living things.
2. Rocks, the oceans and areas of vegetation, like forests, are described as **carbon sinks**. Find out what this means. Write a brief explanation.
3. Describe how human activities affect the carbon cycle.

Hint think in terms of deforestation and burning of fossil fuels etc etc.

Plenary activity

Copy the table below then write the phrases below it in the correct part.

Cause a reduction in the amount of carbon dioxide from the atmosphere	Cause an increase in the amount of carbon dioxide in the atmosphere
<ul style="list-style-type: none">• Dissolving in the oceans• Formation of calcium carbonate (limestone and chalk)• Formation of fossil fuels• Respiration	<ul style="list-style-type: none">• Photosynthesis• Burning fossil fuels• Carbonate rocks are decomposed in volcanic activity

Answers: - In the last 150 years we have burnt huge amounts of *fossil fuels* which took *millions* of years to form. This has caused an increase in the amount of *carbon dioxide* in the atmosphere. Most scientists believe that this extra carbon dioxide is responsible for *global warming*.