The Carbon Cycle Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_

Learning Objectives Self-assessment

* Define photosynthesis,respiration, combustion, decomposition.
* Label the carbon cycle diagram
* Describe the carbon cycle.

**![C:\Users\david\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VL8OP7MR\1299375751[1].png]()TASK 1: Draw lines to match the key word with its meaning**.

KEYWORD DEFINITION

The process by which fuels react with oxygen to release carbon dioxide and heat energy.

Photosynthesis

**RESPIRATION**

Green plants do this to make glucose. It uses light energy to react carbon dioxide with water. Oxygen is released.

COMBUSTION

(BURNING)

(

A chemical reaction that releases energy. It uses up glucose and oxygen. Carbon dioxide and water are produced.

Decomposition

The scientific word for ROTTING ! Fungi, bacteria and detritus feeders (e.g.maggots) break down dead organisms. The nutrients go into the soil. Carbon dioxide is released into the air.

**TASK 2:** **Write word equations for the following:**

RESPIRATION: ………………………………………………………………………………………………………………….

PHOTOSYNTHESIS:………………………………………………………………………………………………………….

COMBUSTION:……………………………………………………………………………………………………………………

Extension: Can you write the balanced symbol equations for the reactions above?

**TASK 3: Add labels to complete the Carbon Cycle Diagram**



Use these labels:



Photosynthesis removes CO2 from the air

Photosynthesis removes CO2 from the air

**TASK 4: WRITE A PARAGRAPH TO DESCRIBE THE CARBON CYCLE.**

The constant cycling of carbon in nature is called ‘The carbon ​cycle'. Each Autumn ,trees lose their leaves .**Describe how the ​carbon in the leaves is recycled so that the trees can use it ​again.(6 marks)**

*Tips: Make use of the key words and definitions overleaf.*

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