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Name/Class: _____

The carbon Cycle

Photosynthesis

Use page 290 as a reference to complete the following assignment.

5 pts

1. Nearly 200 years ago, scientist John Priestley conducted an experiment.
 - a) Describe his experiment in details? (3pts)
 - b) What was the purpose of his experiment? (1pt)
 - c) Was it successful? Why? (1pt)

15 pts

2. Draw a color diagram (3pts) showing the process of PHOTOSYNTHESIS. You diagram must show the following **key points** (4pts) and include all of the **bold words!** (8pts)

Key Points

Phase 1

Light energy is absorbed by the **chlorophyll** in the leaves.

Hydrogen and **Oxygen** are taken from the soil in the form of **water**. The plant uses the light energy to split the water molecules separating the Hydrogen and Oxygen atoms.

The oxygen is released into the **atmosphere**
(The Hydrogen will be used in phase 2)

Phase 2

The plant uses the Hydrogen from phase 1 and combines it with carbon dioxide from the air. This produces **Glucose (Sugar)**.