Photosynthesis Reactants and Products Worksheet

Scoring guide · one credit per question · review written work against each rubric

Photosynthesis Reactants and Products

Question 1

Choice (1)

CO_2 and H_2O are on the reactant side.

Question 2

Carbon dioxide supplies the carbon. CO_2 is the only reactant in the equation that contains carbon.

Question 3

The reactant side has 6 × 2 + 6 × 1 = 18 O atoms. The product side has 6 + 6 × 2 = 18 O atoms.

Question 4

Choice (2)

Light supplies energy for forming products with stored chemical energy.

Aquatic Plants and Light

Question 5

Choice (1)

The bright container gains 1.5 mg/L. The dim container gains 0.3 mg/L and the dark container loses 0.4 mg/L.

Question 6

Bright change = 8.5 − 7.0 = 1.5 mg/L. Dim change = 7.3 − 7.0 = 0.3 mg/L. The difference is 1.2 mg/L.

Question 7

Photosynthesis produces oxygen in bright light and respiration consumes oxygen. The measured increase equals oxygen produced by photosynthesis minus oxygen consumed by respiration.

Question 8

Choice (2)

A matched no-plant control measures background changes in the setup.