Comparing Photosynthesis and Respiration Worksheet

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

Comparing Photosynthesis and Respiration

Question 1

Choice (1)

Photosynthesis produces glucose. Aerobic respiration consumes it.

Question 2

Photosynthesis uses light energy and stores energy in chemical products. Respiration releases some of that chemical energy for cell processes.

Question 3

Choice (2)

Respiration converts glucose carbon into CO_2.

Question 4

Photosynthesis can produce oxygen in the light while aerobic respiration continues to consume oxygen. The two processes can run at the same time.

Tracking Oxygen in a Model

Question 5

Choice (1)

Bright has a net gain of 12 − 4 = 8 units, more than dim or dark.

Question 6

Net change = 0 − 4 = −4 units. Oxygen decreases.

Question 7

Choice (2)

The model records 4 units of O_2 used in every row.

Question 8

The model shows five units produced and four used. The one-unit gain is the difference between gross production and consumption.