Percent Yield from Reaction Data Worksheet

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

Percent Yield from Reaction Data

Question 1

Choice (3)

(15.0 g ÷ 20.0 g) × 100 percent = 75.0 percent.

Question 2

The collected mass is 0.800 × 12.0 g = 9.60 g.

Question 3

Some product may be left in a container or lost during collection. The actual measured mass is then less than the theoretical yield.

Question 4

Choice (2)

Stoichiometry predicts the maximum product if the limiting reactant is completely consumed as modeled.

Comparing Product Recoveries

Question 5

Choice (3)

P gives 80 percent, Q gives 70 percent, and R gives 90 percent.

Question 6

(8.0 g ÷ 10.0 g) × 100 percent = 80 percent.

Question 7

Choice (2)

Q’s difference is 6.0 g, compared with 2.0 g in P and 1.5 g in R.

Question 8

The measured product could be wet or contaminated. The mass would include liquid or another substance as well as the intended dry product.