# Reading a Reaction After a Sample Is Removed

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

### Reading a Reaction After a Sample Is Removed

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### Question 1

Choice (1)

The detector drops from ten to six at the withdrawal, so four units are removed.

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### Question 2

Before the withdrawal the vessel gains ten units in ten seconds, or 1.0 unit/s. After withdrawal it rises from six to 14 in ten seconds, or 0.8 unit/s.

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### Question 3

The drop occurs as liquid is removed. The detector counts only B still in the vessel, so it misses the four units taken by the sampler. The decrease does not by itself show a chemical reaction consumed B.

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### Question 4

There are 14 units in the vessel and four in the withdrawn sample, for 18 units formed. This also equals ten before the withdrawal plus eight after it.