Finding Why a Daughter Count Levels Off

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

Finding Why a Daughter Count Levels Off

Question 1

Choice (3)

The P count drops from 40 to 20, so 20 new D nuclei are produced.

Question 2

Half of the 40 D present at the start decay, leaving 20. The 20 new D nuclei bring the count back to 40.

Question 3

Twenty of the 40 existing D remain, and 20 − 10 = 10 P nuclei decay and become new D. The total is 30.

Question 4

The P count still falls by 20 during interval 2. The D count stays level because 20 D are produced and 20 decay. The steady count does not show that P stopped decaying.