Checking Which Photons Change an Atom

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

Checking Which Photons Change an Atom

Question 1

Choice (4)

The difference between 0 and 7 eV is 7 eV, matching the last trial.

Question 2

From 0 eV, the allowed upward changes are 3 and 7 eV. A 6 eV photon matches neither.

Question 3

Atoms starting at 3 eV can move to 7 eV by absorbing 4 eV. Atoms starting at 0 eV have no allowed upward difference of 4 eV.

Question 4

The absorption shows that some atoms started at 3 eV. Atoms that start at 0 eV do not absorb 4 eV in this model, so the observation does not exclude them.