Checking a Solid That Conducts Under Light

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

Checking a Solid That Conducts Under Light

Question 1

Choice (2)

The strip has a current of 6 and a mobile-electron reading of 12 only during light P.

Question 2

Light P makes some electrons mobile in the model. Those electrons can move through the solid and carry current while the atoms stay in place. Both readings rise during P.

Question 3

Select Refutes the claim. The exhibit keeps the strip solid at the same temperature. The current appears with mobile electrons during P and returns to zero when they are no longer mobile. The model explains conduction without melting.

Question 4

The current stays zero in the model because the strip has no mobile electrons. Equal energy arriving each second does not establish that the strip responds to both lights in the same way.