

Argument: Light & Plant Growth

Two students, Christina and Andrew, set up an experiment to help them determine how light affects plant growth. The students placed bean seedlings in three locations with their classroom and measured the growth of the bean seedlings over the next five days. Bean seedlings that were placed in a dark closet grew 5 cm in 3 days, but then stopped growing. Bean seedlings that were placed on a countertop away from the window grew 10 cm in 5 days. Bean seedlings that were placed on a windowsill with full sunlight grew 15 cm in 5 days. Andrew and Christina discussed the results of their experiment.



Christina: “Well, light helps plant grow. The plants on the countertop got some light and were able to grow. The plants in the window got more light, and that’s why those plants grew the most.”

Andrew: “That’s true, but the plants in the closet did grow. So, plants must not always need light to grow.”

Christina: “Well I remember learning in class that light gives plants energy, and they need the energy to grow. The plants in the closet must have had some energy stored up. But without light, they ran out of energy and stopped growing.”

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| Question: How does light affect plant growth? | |
| Claim: | Evidence: |
| Reasoning: | |