

Plan a Fair Plant-Growth Test

Grades 3-5 Name: _____ Date: _____

Context and evidence

Question: Does the number of daylight hours affect bean-plant height? Four groups propose different plans.

Your investigation

1. Identify the independent variable, dependent variable and three control variables.

2. Choose suitable light conditions and explain why more than one plant is needed in each condition.

3. Design a 14-day table with units for height and a place for observations.

4. Name one safety or care consideration.

5. Predict a possible pattern, then write what result would make you reconsider the prediction.

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Learning goals

Reason accurately, use evidence, show a method and communicate a defensible conclusion.

Response guidance

A fair test changes light exposure while controlling species, soil, water, pot size and measurement method. Replicates reduce the influence of unusual plants.

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Extension and assessment

Ask learners to compare methods, revise one response after feedback and identify the evidence that most changed their thinking.