

Plant Test Detectives

Read how one fair test can answer a plant question.

2-LS2-1 "Plan and conduct an investigation to determine if plants need sunlight and water to grow. Assessment Boundary: Assessment is limited to testing one variable at a time."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the thing Jay changes, and circle two details he keeps the same, to show how he makes a fair test.

Jay Tests Sunlight

- ① Jay wants to find out whether bean plants need sunlight to grow. He gets two same-size pots, the same kind of seeds, and the same soil. He gives both plants the same amount of water each day.
- ② Jay puts one pot by a sunny window. He puts the other pot in a dark cabinet. He checks both plants after seven days and measures each plant with a ruler. Sunlight is the only thing he changes.
- ③ Jay records each plant's height and color in a chart. Then he compares the two plants. If the sunny plant grows more than the dark plant, his evidence suggests that sunlight helps bean plants grow. A fair test changes one thing.

2 ANSWER WITH EVIDENCE Use the passage

1 What question is Jay trying to answer with his investigation?

2 Why does Jay give both plants the same amount of water each day?

3 What information will Jay compare to look for evidence about sunlight?

3 YOUR TURN Your own words

Plan a water test for two bean plants. Write exactly two sentences that tell what you will change, what you will keep the same, and what you will observe after one week.

PART 1 • READ AND MARK

Underline the thing Jay changes, and circle two details he keeps the same, to show how he makes a fair test. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What question is Jay trying to answer with his investigation?	Whether bean plants need sunlight to grow.
2	Why does Jay give both plants the same amount of water each day?	He keeps water the same so sunlight is the only thing he changes.
3	What information will Jay compare to look for evidence about sunlight?	He will compare the plants' heights and colors after seven days.

PART 3 • YOUR TURN (SAMPLE ANSWER)

I will give one bean plant water each day and another bean plant no water, while keeping the seed type, soil, pot size, and sunlight the same. After one week, I will measure their heights and note their leaf colors.

Accept plans that test water by changing only the amount of water. The student should name at least one controlled detail and an observation, such as plant height, leaf color, or number of leaves.