

What Plants Need

Grade 2 • SCIENCE • Students use simple experiment results to determine that plants need light and water to grow. • Standards: 2-LS2-1

Read about each experiment with plants. Then answer the question about what the results show.

1. Maya put one plant in a sunny window. She put another plant in a dark closet. She gave both plants water. After two weeks, the plant in the window grew tall and green. The plant in the closet turned yellow and droopy. What do plants need to grow?
2. Ben watered one plant every day. He did not water another plant at all. Both plants were in the sun. After one week, the watered plant looked healthy. The plant with no water turned brown and dry. What do plants need to grow?
3. Two plants were both given water every day. One plant sat in bright sunlight. The other plant was kept in a dark box. After ten days, which plant grew better?
4. Lila had two small plants in sunny spots. She watered one plant but forgot to water the other plant. After five days, which plant looked healthier?
5. Mr. Chen placed two plants on his desk. Both plants got water. One plant was next to a lamp that stayed on all day. The other plant was in a corner with no light. After two weeks, the plant by the lamp had new leaves. The plant in the corner did not grow. Why did the plant by the lamp grow better?
6. Rosa put two plants outside in the sunshine. She watered one plant every morning. She did not give the other plant any water. After a week, one plant had bright green leaves and the other plant had wilted leaves. Which plant had bright green leaves?
7. Three plants were all watered the same amount. Plant A was in a sunny garden. Plant B was under a shady tree. Plant C was in a basement with no windows. After three weeks, Plant A grew the most and Plant C did not grow at all. What does this experiment show that plants need?

8. Jake did an experiment with four plants in sunny windows. He watered Plant 1 every day, Plant 2 every three days, Plant 3 once a week, and he never watered Plant 4. After two weeks, Plant 4 was dead and the other plants were alive. What does this show?

9. Two plants started the same size. Both got water every day. Plant X was by a bright window for twelve hours each day. Plant Y was in a dim hallway with only a little light. After four weeks, Plant X was twice as tall as Plant Y. Why did Plant X grow more?

10. A class did an experiment with six plants. All six plants were in the same sunny classroom. The students watered three plants regularly and did not water the other three plants. After three weeks, the watered plants were healthy and growing. The plants without water stopped growing and their leaves fell off. What does this experiment show that plants need?

Answer Key — What Plants Need

For the teacher / parent. Do not distribute with the worksheet.

1. light (*The only difference was light, so plants need light to grow.*)
2. water (*The only difference was water, so plants need water to grow.*)
3. the plant in bright sunlight (*Plants need light to grow well.*)
4. the plant that got water (*Plants need water to stay healthy.*)
5. because it got light (*The lamp provided light that the plant needed to grow.*)
6. the plant that got water (*The watered plant stayed healthy and green.*)
7. light (*The plants with more light grew better, showing plants need light.*)
8. plants need water to live (*The plant without any water died, showing plants need water.*)
9. because it got more light (*Plant X received more light, which helped it grow taller.*)
10. water (*Only the watering was different between the two groups, and only the watered plants stayed healthy, so the experiment shows plants need water.*)