

Name:

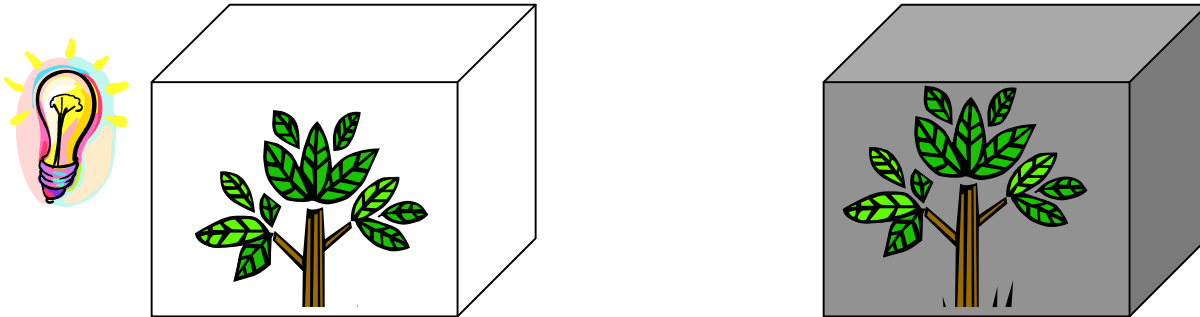
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Biology: Understanding Photosynthesis

Photosynthesis requires light energy to proceed, but most plants are not in the sun 24 hours a day. What reactions are taking place during the night? Consider the following experiment to help you answer the questions below.

You have two sealed boxes. One is clear with a light source shining into it, and the other is completely dark. In each box is placed a healthy, genetically identical plant with no known disorders or diseases. Both plants have access to adequate water and nutrients. At the end of one week, both plants are still alive, but one is clearly doing better than the other.



1. What INPUT products are required for photosynthesis?
2. What INPUT products are required for cellular respiration?
3. What are the output products of photosynthesis?
4. What are the output products of cellular respiration?
5. After one week in the box, which plant will be healthier and why?
6. Why are BOTH plants still alive?
7. Which gasses will increase in each box?
8. Which gasses will decrease in each box?
9. In which box is the Calvin Cycle taking place?
10. In which box is cellular respiration taking place?