

# Photosynthesis

After watching the time-lapse video of the plant growing, answer the following question:  
Where does the mass in the plant come from?

## Activity- Photosynthesis Play

Six students in the class will act out a play about photosynthesis. As they act out the play, answer the following questions:

1. List the three things that Planty eats.

A.

B.

C.

2. After the chemical reaction, what is produced that feeds Planty's cells?

3. Most of what substance exits Planty through the stomata in his leaves?

## Notes- Photosynthesis

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|--|---|
| Photosynthesis   | <ul style="list-style-type: none"> <li>Photosynthesis is the process in which plants <b>use</b> _____, _____, and _____ energy <b>to create</b> _____ and _____.</li> </ul>   |
| In the box to the right, write the formula for photosynthesis. |   |
| Where does Photosynthesis occur?                               | <ul style="list-style-type: none"> <li>Photosynthesis occurs within the _____ parts of _____.</li> <li>Only plants can perform photosynthesis.</li> </ul>   |
| Why is Photosynthesis so important?                            | <p>It occurs within the _____ in plant cells.</p> <ol style="list-style-type: none"> <li>1. It provides the _____ we breath.</li> <li>2. It removes much of the _____ from the atmosphere.</li> <li>3. It produces _____.</li> <li>4. It creates usable _____.</li> <li>5. There would be no _____ without it.</li> </ol> |
| Energy Transfer from the sun to plants                         | <p>The process of Photosynthesis changes...</p> <ol style="list-style-type: none"> <li>1. _____ (Light) energy in the SUN to...</li> <li>2. _____ energy in plants</li> </ol>   |

## Activity- Photosynthesis Race

Directions: Students will work at their tables in groups of 4. Around the classroom, there will be bins with cards that are the different parts of photosynthesis. The objective for each table is to be able to make a model of the chemical formula for Photosynthesis by collecting the correct cards from each bin. To begin the game, all four students will go to a different bin and collect one card. They will place them on their table and discuss what cards need to be kept and which ones need to be returned. Then they will continue to collect cards from bins one at a time until they have completed the formula. The first table with the correct complete formula will get a prize. Hint: Make sure you have a balanced equation with the correct number of each molecule.

Conclusion: Draw your complete formula in the box below.



After the play, notes, and the race, answer the following question:  
Where does the mass in the plant come from?

Did your answer change? Why?