

# Photosynthesis

## Internet Activity

Name \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

Period # \_\_\_\_\_

### Illuminating Photosynthesis

- Type in the following link:  
<http://www.pbs.org/wgbh/nova/methuselah/photosynthesis.html#>
- Read the introduction entitled “Illuminating Photosynthesis” by Rick Groleau
- Click on the link that reads: “*Go to Illuminating Photosynthesis.*”
- Read the introductory poem.
- Click on “*The Cycle*” at the top of the box

1. Click on each of the following items, and explain what happens:

- a. The *shade* over the *window*: \_\_\_\_\_
- b. The *container* of *water*: \_\_\_\_\_
- c. The *child*: \_\_\_\_\_

2. a. What *gas* does the child provide for the plant to use? \_\_\_\_\_

b. What *gas* does the plant provide for the child to use? \_\_\_\_\_

c. Will the plant continue to produce this gas if the shade over the window is closed? (try it out to see!) \_\_\_\_\_

3. According to this animation, what 3 main things does the plant need for *photosynthesis* to occur?

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

Click on “*The Atomic Shuffle*” at the top of the box.

Read the introductory poem, and click on “*next*”

4. What type of molecule is shown in the leaf? \_\_\_\_\_

5. Draw one of the molecules below, as it is shown in the leaf.



6. According to the reading, these molecules “do not come from the tap.” What two places do they come from?

(1) \_\_\_\_\_ (2) \_\_\_\_\_

Click on “*next*” and watch carefully. You may click on “*replay*” to watch this again.

7. a. What is “stripped” from each water molecule?

\_\_\_\_\_

b. From where does the cell get the energy to do this? \_\_\_\_\_

c. The stripped molecules form pairs. Where does it go after this?

\_\_\_\_\_

Click on “*next*”

8. a. What gas enters the leaf? \_\_\_\_\_

b. This gas enters through “holes” in the leaf. What are they called? \_\_\_\_\_

Click on “*next*”

9. What molecule is formed *once again*? \_\_\_\_\_

Click on “*next*”

10. Another molecule is formed (“and boy is it sweet”). Draw this molecule below as shown.



11. What is the name of this molecule? \_\_\_\_\_

Click on “*Three Puzzlers*” at the top of the box.

12. Answer each of the following questions, and explain *in your own words*.

a. Can a tree produce enough oxygen to keep a person alive? Explain.

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b. Can a plant stay alive without light?

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c. Can a plant survive without oxygen? Explain.

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