

# Thank You!

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Name \_\_\_\_\_ Date \_\_\_\_\_

### Biomolecules Bellringer

For each of the following write C for carbohydrates, L for lipids, P for proteins and N for nucleic acids.

1. \_\_\_\_\_ Genetic information of organisms
2. \_\_\_\_\_ Made of subunits called amino acids
3. \_\_\_\_\_ Specialized molecules make up the cell membrane
4. \_\_\_\_\_ Your body's source for fast energy
5. \_\_\_\_\_ Makes up muscles, hair, and skin
6. \_\_\_\_\_ Glucose is the simplest sugar
7. \_\_\_\_\_ DNA and RNA are examples
8. \_\_\_\_\_ Made of nucleotides
9. \_\_\_\_\_ Made of monosaccharides
10. \_\_\_\_\_ Potatoes are an example
11. \_\_\_\_\_ Olive oil is an example
12. \_\_\_\_\_ Used for long-term energy storage
13. \_\_\_\_\_ Often used for structure or chemical reactions in the body
14. \_\_\_\_\_ Found in the nucleus of your cells
15. \_\_\_\_\_ Used by the cell as ID badges and cell-to-cell communication

Name \_\_\_\_\_ Date \_\_\_\_\_

### Biomolecules Bellringer

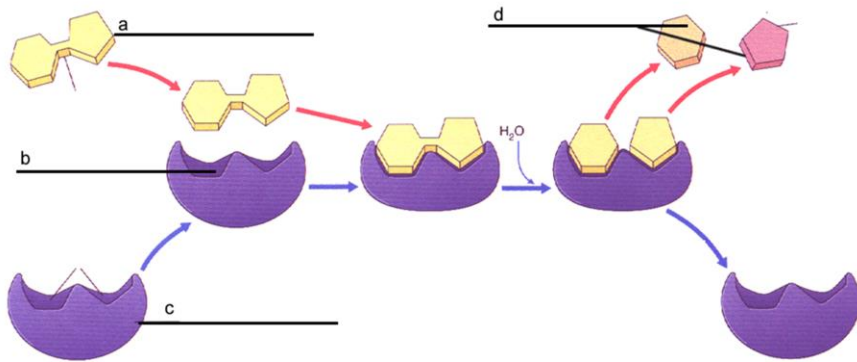
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### Enzymes Bellringer

Labeling using the following parts: enzyme, product, enzyme-substrate complex, active site, substrate



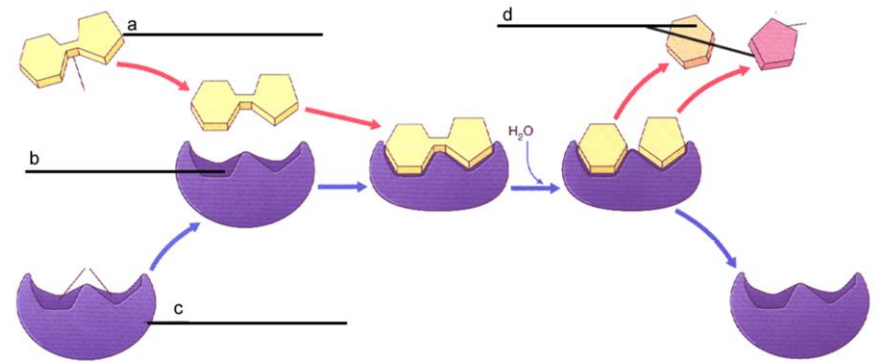
This Photo by Unknown Author is licensed under [CC BY-SA-NC](https://creativecommons.org/licenses/by-sa/4.0/)

1. Which part of this reaction remains unchanged? \_\_\_\_\_
2. Enzymes are known as biological catalysts. What does a catalyst do?  
\_\_\_\_\_  
\_\_\_\_\_
3. Enzymes are very specific in the reactions they catalyze. What about the enzyme makes it so specific? \_\_\_\_\_
4. What do most enzymes end in? \_\_\_\_\_
5. What are three factors that will affect enzyme activity?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
6. This is sometimes referred to as a lock & key model. Explain the comparison. \_\_\_\_\_  
\_\_\_\_\_
7. Sometimes **inhibitors** block the active site. What do you think would happen? \_\_\_\_\_  
\_\_\_\_\_

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Name \_\_\_\_\_

Date \_\_\_\_\_

3-2-1 Bellringer

**3 Things I Noticed:**

**2 Things I Think:**

I think \_\_\_\_\_ because I  
observe \_\_\_\_\_.

**1 Thing I Wonder:**

Name \_\_\_\_\_

Date \_\_\_\_\_

3-2-1 Bellringer

**3 Things I Noticed:**

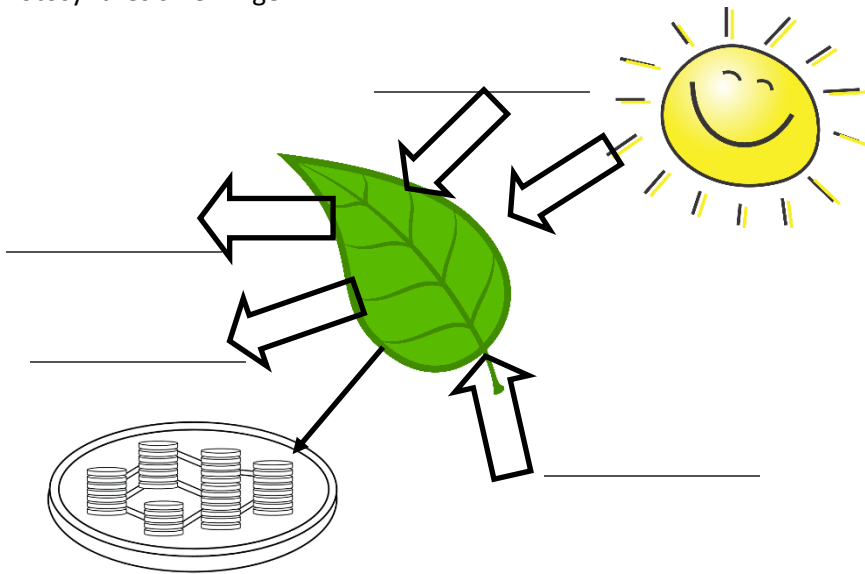
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Name \_\_\_\_\_ Date \_\_\_\_\_

### Photosynthesis Bellringer



Formula: Circle the reactants and draw a square around the products

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ → \_\_\_\_\_ + \_\_\_\_\_

Occurs in the \_\_\_\_\_, which contains the pigment \_\_\_\_\_ . The function is to \_\_\_\_\_ .

What is the purpose of photosynthesis? \_\_\_\_\_

What structure allows for gas exchange in the leaf? \_\_\_\_\_

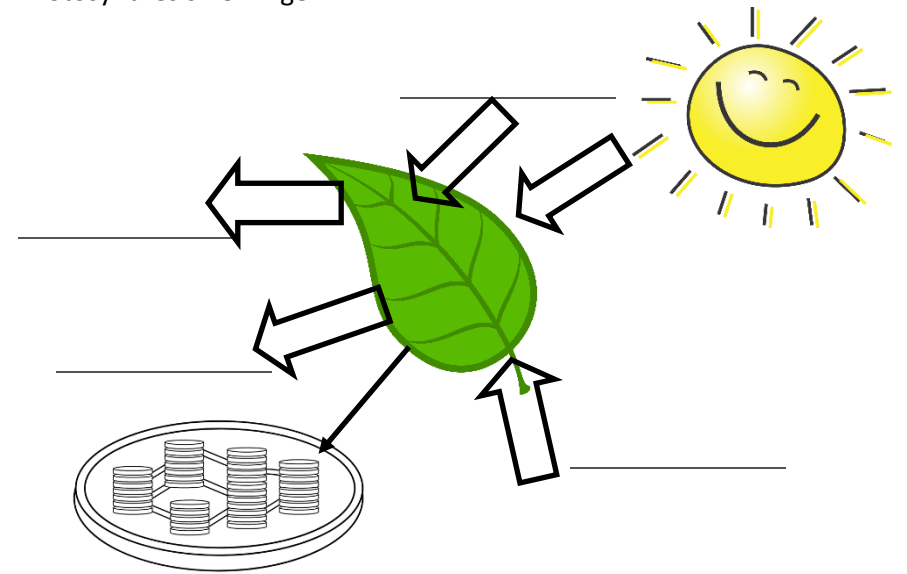
What structure of the plant absorbs water? \_\_\_\_\_

Which part of the formula above is not actually a reactant, but required to make the reaction go? \_\_\_\_\_

A \_\_\_\_\_ is something that makes a reaction go faster.

Name \_\_\_\_\_ Date \_\_\_\_\_

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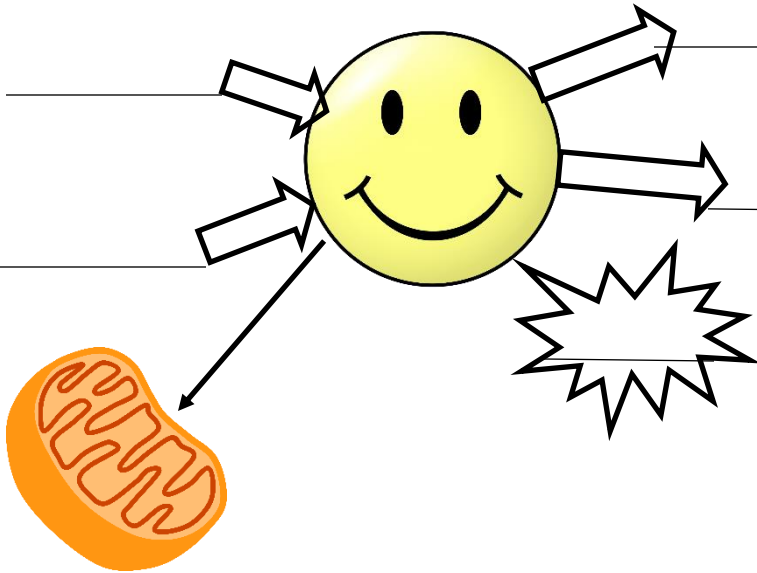
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### Cellular Respiration Bellringer



Formula: Circle the reactants and draw a square around the products

\_\_\_\_\_ + \_\_\_\_\_ → \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_

Occurs in the \_\_\_\_\_ of all \_\_\_\_\_.

What is the purpose of cellular respiration? \_\_\_\_\_

\_\_\_\_\_

Where in the body does cellular respiration take place? \_\_\_\_\_

\_\_\_\_\_

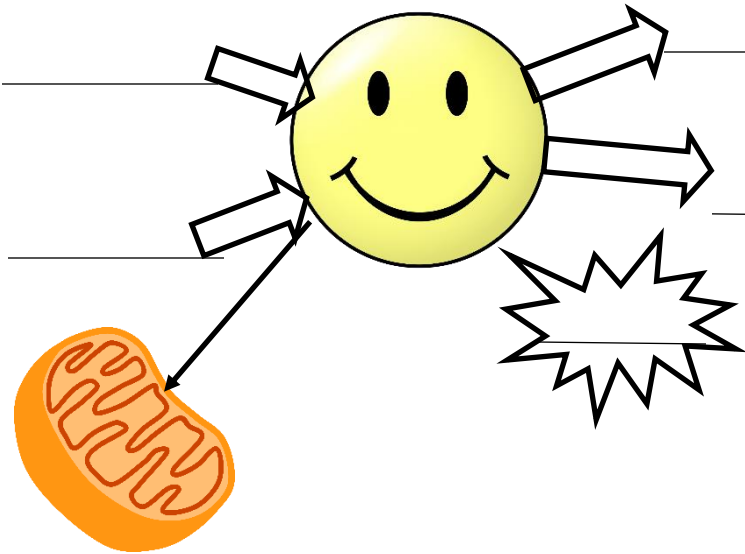
What structure do mammals have that allow for gas exchange? \_\_\_\_\_

Where do you get the 2 reactants:

- \_\_\_\_\_
- \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

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Name \_\_\_\_\_ Date \_\_\_\_\_

### Vocabulary Bellringer

Match the following vocabulary words to the correct definition.

- |                   |                 |                         |
|-------------------|-----------------|-------------------------|
| a. photosynthesis | e. fermentation | i. glycolysis           |
| b. aerobic        | f. chloroplast  | j. chloroplast          |
| c. mitochondria   | g. anaerobic    | k. cellular respiration |
| d. products       | h. reactants    | l. ATP                  |

- \_\_\_\_\_ The process of converting the chemical energy in glucose into ATP
- \_\_\_\_\_ The step in cellular respiration when glucose is broken into pyruvate
- \_\_\_\_\_ The organelle in which photosynthesis takes place
- \_\_\_\_\_ The body's form of cellular energy
- \_\_\_\_\_ The molecules formed during a chemical reaction
- \_\_\_\_\_ Word that literally means "air"
- \_\_\_\_\_ The organelle in which cellular respiration takes place
- \_\_\_\_\_ The molecules that go into a chemical reaction
- \_\_\_\_\_ The process of converting light energy into chemical energy in glucose
- \_\_\_\_\_ Word that literally means "without air"
- \_\_\_\_\_ Process that allows cells to continue glycolysis to make ATP without oxygen
- \_\_\_\_\_ One pigment found in chloroplasts; this one is green

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### Pineapple & Gelatin

Watch the video [bit.ly/36t33L5](http://bit.ly/36t33L5).

Pineapple contains the enzyme bromelain, which breaks down proteins. Gelatin contains the protein collagen, which helps it set up to make the jiggly jell-o we all know and kinda love. When the shape of an enzyme changes, the enzyme has been denatured.

1. Explain what happens to the gelatin in each jar with pineapple:
  - a. Fresh \_\_\_\_\_
  - b. Boiled \_\_\_\_\_
  - c. Canned \_\_\_\_\_
2. Why did the fresh pineapple cause this to happen? \_\_\_\_\_  
\_\_\_\_\_
3. What caused the difference in the gelatin with the fresh vs. boiled gelatin? \_\_\_\_\_  
\_\_\_\_\_
4. Amylase is an enzyme that breaks down starch into sugars. Amylase can be found in your saliva and some fruits. Would amylase cause the same thing that bromelain did in the gelatin? Explain.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Explain how enzymes work. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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