

## **Photosynthesis**

Write down the word and symbolic equation for photosynthesis

- Label the products and reactants

## **Cellular Respiration**

Write down the word and symbolic equation for cellular respiration

- Label the products and reactants

How are the two processes related? Be specific.

## Photosynthesis vs Cellular Respiration

Cellular Respiration and Photosynthesis can be thought of as opposite processes. Energy flows in opposite directions in the two processes.

Complete the table using the phrases listed below

<i>Green plant cells</i>	<i>Chloroplast</i>	<i>Release energy from food</i>
<i>CO<sub>2</sub> + H<sub>2</sub>O + ATP</i>	<i>Glucose + O<sub>2</sub></i>	<i>All cells</i>
<i>Mitochondria</i>	<i>Capture &amp; Store energy</i>	<i>Glucose + O<sub>2</sub></i>
	<i>CO<sub>2</sub> + H<sub>2</sub>O + light</i>	

	PHOTOSYNTHESIS	RESPIRATION
<b>What is its purpose?</b>		
<b>What type of cells do this?</b>		
<b>What organelle in the cell does this?</b>		
<b>Reactants</b>		
<b>Products</b>		

1. Which process releases energy for the cell?
  
2. Which process stores energy for the cell?
  
3. What type of energy is used to make “food” during photosynthesis?
  
4. What type of energy is made during cellular respiration?
  
5. How do the products of photosynthesis compare to the reactants of cellular respiration?