

photosynthesis vs. 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>CO₂ + H₂O + ATP</i>	<i>Glucose + O₂</i>	<i>All cells</i>
<i>Mitochondria</i>	<i>Capture & Store energy</i>	<i>Glucose + O₂</i>
	<i>CO₂ + H₂O + light</i>	

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

- Write the equation for each process:
 - Photosynthesis:
 - Respiration:
- Which process:
 - Releases energy for the cell?
 - Stores energy for the cell?
- What type of energy:
 - Is used to make food during photosynthesis?
 - Is made during respiration?
- How do the products of photosynthesis compare to the reactants of respiration?