

Answers

1. What is photosynthesis?

How autotrophs use sunlight to convert $CO_2 + H_2O$ into food (glucose)

The chloroplasts do most of the work. Chloroplast

plants need chloroplast to trap sunlight and convert it into the molecules in chloroplast. Chloroplasts have two of chloroplasts & organelles

1. What about the equation for photosynthesis and complete the following

These 2 molecules needed for photosynthesis: $CO_2 + H_2O$

These 2 molecules produced by photosynthesis: glucose (C₆H₁₂O₆) & O₂

2. What is cellular respiration?

How cells convert food (glucose) into ATP energy (cellular energy)

3. What about the equation for cell respiration and complete the following

These 2 molecules needed for ^{cellular} respiration: C₆H₁₂O₆ + O₂

These 2 molecules produced by cell respiration: $CO_2 + H_2O$

What is the "energy" molecule that is produced? ATP

4. In what cell organelle does respiration take place in eukaryotes? Mitochondria

These two processes occur in junction in the cytoplasm

Mitochondria has alot of inner membranes (it folded up)

and this membrane contains the enzymes that build ATP

It is made from 2 parts: 1. Glucose 2. Oxygen

What about? 1. Oxygen that is used by the

The mitochondria produced by each process

are what's needed for the other process!

products of photosynthesis are the reactants of C.R.

and reactants of C.R. are products of photosynthesis!

5. How do the two processes connect together?

Energy from one feeds into the other

Sunlight uses food energy and ATP is that energy

for the respiration

