

# [Photosynthesis and biochemistry of chloroplast membranes assignment](https://assignbuster.com/photosynthesis-and-biochemistry-of-chloroplast-membranes-assignment/)

Photosynthesis and Biochemistry of Chloroplast Membranes Summary: Within our lifetime we will see begin to see human population rocket out of control. Due to this population Increase food will become a more rare and valued commodity than it already is today. Understanding the principle concepts of Photosynthesis and being able to apply them to create faster and better growing plants could be a solution to famine in the future. In this experiment we tested the effects of light on chloroplast membranes. First, we found the peak absorbent of these membranes.

Then we tested the effects of different colors of light on the chloroplasts membranes to see which colors progress photosynthesis most effectively. We found a clear peak absorbent of the chloroplasts at around 620 NM. We also determined that red and purple light effected the photosynthesis reaction the most when making the reaction go faster. Overall, this experiment can teach anyone the concepts of photosynthesis and how to maximize plant growth through the use of different colored lighting. This experiment is an important first step to helping any new scientist on his path to retreating the next agriculture breakthrough.

Methods: In this experiment chloroplast membrane solutions were prepared and tested. The peak absorbent of the solution was determined by using a spectrophotometer at ranging wavelengths from 380 to 740 NM. These results were then plotted onto Microsoft Excel to determine trends and peaks in the data. The solutions then were tested by exposing them to different lighting conditions and recording their absorbent at 605 NM. One was a control test where It was exposed to light In one minute intervals for five minutes. Each solution was tested under the same time constraints.