



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Alex Bryant; Michael Greenwald	Project Number S0607
Project Title Carbon Dioxide Gas and the Greenhouse Effect	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of our experiment was to determine if increasing amounts of carbon dioxide in the atmosphere would cause increases in temperature.</p> <p>Methods/Materials Carbon dioxide gas was obtained from dry ice which was measured by the displacement of water when the dry ice sublimated as it warmed. Increasing amounts of carbon dioxide gas were sealed in four Erlenmeyer flasks. Another two flasks, one open and one closed, contained no added carbon dioxide gas. The temperature of the air in all six flasks was recorded at thirty second intervals for fifteen minutes during exposure to sunlight.</p> <p>Results After exposure to sunlight, the flasks with larger amounts of carbon dioxide gas had correspondingly higher temperatures when the temperatures stabilized. These temperatures were also higher than the flasks which had no added carbon dioxide.</p> <p>Conclusions/Discussion The results of the experiment supported our hypothesis that the flasks filled with larger amounts of carbon dioxide gas would produce correspondingly higher temperatures when exposed to sunlight, and would have higher temperatures than the flasks without added carbon dioxide. The results also support the theory that larger emissions of carbon dioxide could cause an increase in atmospheric temperature and therefore be a cause of global warming.</p>	
Summary Statement Our project is about whether increasing the amount of carbon dioxide gas in the atmosphere causes an increase in temperature.	
Help Received Our science teacher allowed us to use school laboratory equipment.	