



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Vianney Cassyleon	Project Number S1604
Project Title Greenhouse Gases	
Abstract Objectives/Goals See which of the most common greenhouse gases has the greater effect to the light by increasing the temperature of the earth. Methods/Materials Material: 1. Glass container 2. 2 lamps 3. Methane 4. Water Vapor 5. Carbon Dioxide 6. Thermometer 7. Hose. IV. Procedure: 1. Put the Methane or any of the other gases (separately) on the glass container. 2. Stick the thermometer on the container. 3. Place the lamps in front of the container, but in front of the thermometer on the container. 4. Turn on the lights. 5. Check the temperature of the gas, inside of the container, every certain time. Note: After you put the water vapor inside of the container, wait until the temperature goes back to normal, to turn on the lights and start checking the temperature. Results Carbon dioxide and methane absorb more heat than any other greenhouse gas in the earth. Conclusions/Discussion VI. Discussion and Conclusion: I found out that Carbon Dioxide absorbs more heat than Methane, the differences between these two gases was between 66% to 90% significantly in the standard deviation, different from air and water vapor, which overlap and demonstrated to have not much effect to heat by not increasing the temperature, but just maintaining it balance. When liquid water is evaporated to form water vapor it helps to cool the surface of the earth, and it keeps the air warm enough to support life, this was proven with the results I got in my data by water vapor being lower than air. Methane and Carbon dioxide had a bigger reaction to light, by absorbing the heat, and demonstrating that they do increase the temperature of earth's surface significantly. Carbon Dioxide has the majority of distribution on earth's atmosphere with 76% and methane with 16%. In the study that I did to test which greenhouse gas had more effect to heat, I got as a result Carbon Dioxide following by Methane, a result that is different to my hypothesis. Carbon Dioxide is an important gas because it transmits visible light but absorbs strongly in the infrared.	
Summary Statement Greenhouse gases effect to light.	
Help Received	