



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Paul B. Smith, III	Project Number J1022
Project Title Cool Landscaping for a Hot Planet: How Various Backyard Surfaces Influence Temperatures	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to find out what backyard materials would cool down the area the most. I knew global warming is a big problem for the world and I wanted to discover if we could cool down the planet starting in our own backyards.</p> <p>Methods/Materials I prepared five materials in boxes and set up heat lamps on each box. I tested water, grass, bark, brick and gravel. I recorded the temperatures of the various materials in 30-minute periods with the heat lamps on. Then I shut off the heat lamps and recorded the temperatures after 30 minutes and 60 minutes. I recorded the results after five experiments and analyzed the data.</p> <p>Results I found out that water cools down the environment more than grass, gravel, bark or brick. Gravel increases the temperature more than other surfaces tested.</p> <p>Conclusions/Discussion Through my research I discovered that urban areas are hotter than rural areas and that the planet as a whole is getting warmer. This effect could cause many problems to the health of individuals and to the environment. We can all help to lower the temperature of the earth if we use materials wisely in our own backyards. Pools and water help reduce the effect of heat. Gravel, bark, brick and other materials are hotter than water and grass. In planning our landscaping, we can all use cooler materials.</p>	
Summary Statement My project tested landscaping materials to determine what materials could cool down our planet.	
Help Received Mother helped type report. Father took pictures and bought supplies.	