



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) William A. Sanchez	Project Number J2297
Project Title The Mind of a Reptile	
Abstract	
Objectives/Goals My objective was to prove whether lizards are left or right brained. My goals were to find sufficient data and to learn more about the neurology of lizards.	
Methods/Materials The right hemisphere of the lizard brain is in control of predator monitoring. The left side of the brain is in control of prey monitoring. I tested this by timing how fast both a wild and captive lizard reacted to each. I also tested whether they reacted to predator or prey first when side by side. I did this by getting a cardboard box and making a wall through a quarter of the box so that there are two rooms. The room on the right consisted of the predator which were two fake but realistic tarantulas and a fake lizard. The room on the left consisted of the prey which were five crickets. I used a stopwatch to time their reactions to predator and prey. I also placed the predators in each lizards habitat and observed their reaction.	
Results Based on my testing, I found that lizards are in fact right brained. This is because of the speed of their reactions to predators and their actions towards an attack. These results are only based on the wild lizard because they are the original lizards and have much more experience than captive lizards. I only included captive lizards so that people could understand my project more. The wild lizard would try to hide in the leaves of its habitat and would try to blend in with its substrate. although, I found it odd that it reacted to prey first when the prey was side by side with a predator. I found this very odd.	
Conclusions/Discussion To conclude, lizards are right brained because of the timing of their reactions towards predators and the effort that they would take to be safe from a predator. My hypothesis was that lizards were in fact right brained. I believed this because of the large chance of being eaten rather than starving to death.	
Summary Statement My project is about how lizards are left or right brained.	
Help Received Mother helped by materials; Father helped with the creation of the board.	