



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> <b>Christine M. Pittman</b>	<b>Project Number</b> <b>J1025</b>
<b>Project Title</b> <b>How Can You Estimate an Animal's Weight?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> Using an animal's body measurements to determine its weight. <b>Methods/Materials</b> Materials: Tape measure, livestock scale, animals, calculator Methods: 1. Measure the heart girth from slightly behind the shoulder blade, down over the fore ribs and under the body to behind the elbow. 2. Measure the length of the animal's body from the shoulder to the pin-bone of the rump. 3. Take measurements obtained in steps one and two and apply the following formula to determine the animal's body weight: heart girth times heart girth times body length divided by 300 equals estimated weight of the animal. 4. Weigh the animal on a livestock scale. 5. Record results. Do steps 1-5 for each animal. <b>Results</b> I tested the formula on eighteen different animals and charted the results. I then computed the difference between the estimated weight and the scaled weight of each animal and averaged the differences into percentages. I found out that you can determine the weight of the healthy animal within 5 pounds of the animal's actual weight. <b>Conclusions/Discussion</b> I learned that I can estimate an animal's weight within 5 pound of its actual weight using the formula stated earlier. The formula appears to work on only healthy animals. I even tried to adjust this formula to see if it would work on humans but have not been successful yet.	
<b>Summary Statement</b> I will use body measurements of an animal to estimate its weight.	
<b>Help Received</b> Mom helped me organize and edit the data and took pictures of the animals. Dad sprayed my display board black. A friend in my 4-H group helped me by holding the animals while I measured them.	