

# CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J1908** 

**Project Title** 

Pavlov's Chicken: A Study in Classical Conditioning

#### **Abstract**

## **Objectives/Goals**

My objective was to determine if chickens will exhibit the conditioned response of coming to the gate with the ringing of a telephone.

### Methods/Materials

My hens (127 total; 64 Leghorns, 63 Brown hens) were already conditioned to come to the fence when I appear .. knowing that I will feed them a treat of scratch feed. I rang the telephone without me present to make sure the hens did not come to the gate with a bell alone. I did this for two days. I then rang the bell AND feed them scratch, at the same time, and did this once daily for 3 weeks. I then rang the telephone without me present and observed results through a fence to see if they exhibited a conditioned response to a bell.

#### **Results**

When the telephone alone was rang - 67% of the Leghorn hens and 78% of the Brown hens exhibited the conditioned response of coming to the fence.

#### Conclusions/Discussion

I accepted my hypothesis of Hens Will Exhibit the Conditioned Response of Coming to the Fence when the Bell From a Telephone is Rang. Not all of the hens came to the fence, however a majority from each breed did. From my conclusions, I have three new possibilities that dovetail from my findings. I am anxious to discuss these and do follow up studies.

#### **Summary Statement**

My project determines that chickens will exhibit a conditioned response.

### **Help Received**

Mom and Dad helped with holding and ringing the phone while I scattered the scratch feed. Mom helped with graphs.