CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY

Name(s)
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Project Number
J1204

Project Title
How Age Affects Dilation of Pupil in Felis domesticus

Abstract

Objectives/Goals
Objective
The objective is to detect if age can affect how much a cat#s eyes contract when exposed to light.

Methods/Materials
Procedure/Materials
I waited for night to fall, and located all the cats. In the dark, I shined light on the cat#s faces, waited 5 seconds, and shot a photo. I followed through with this on three separate occasions. Then, after the third test, I applied the photos to a graph, and found the area. Some of the materials were the photo sizing and zooming software. The other materials were the camera, USB cord, and an 8 LED flashlight.

Results
Results
Out of the three tests, Oscar, youngest, averaged a 3. Niamo, the second youngest, scored 3.3. Sniff, next-to-oldest, had an average outcome of 11.3. Bootsy, the oldest, got the same.

Conclusions/Discussion
Conclusion
My hypothesis proved correct! The pie charts show Bootsy and Sniff dominating with the hugest slices. Then, the coordinate graph shows an increase of area along with the increase of age.
This project is important because you might be able to estimate a cat#s age on how its eyes contract. You can also tell if the cat has Feline Leukemia, and needs help, because when the cat has this disease, its eyes secrete assort of mucus that slows down the contraction process and the pupil doesn#t contract as much.

Summary Statement
My project is to find out if age affects the way cats' eyes contract when exposed to light. I tested four cats, two old cats, and two young cats. There were two males and two females. I got my results after finding the area of their pupil.

Help Received
My science teacher helped me research my project and my mom helped me with my writing and grammar. I used computer equipment at Anderson Valley Junior/Senior High School. I was under the supervision of Dr. Larry Chaulk, DVM .