



Name _____

Homeostasis of the Eye

Objective: To observe how the eye maintains homeostasis with changing light input.

Question: How does light affect the pupil in the eye?

Hypothesis: IF, Then statement.

Procedure:

1. Observe the subject's eye. Record the color of the iris in your lab notebook.
2. Observe the pupil of the eye.
3. List three characteristics of the pupil in normal light. (size, etc.)
4. Turn out the lights for three minutes and repeat step 1.
5. With the lights still out, shine a flashlight in the subject's eye and observe the change in the pupil. List the changes that occur.
6. Turn the lights back on wait three minutes and repeat step 3.
7. Repeat procedure for each member of the group.

Data:

Color of Iris with LIGHTS ON	3 characteristics of pupil in NORMAL LIGHT	Color of Iris with LIGHTS OFF	3 characteristics with FLASHLIGHT

Analysis:

1. List the differences between the eye with the overhead lights on and the lights off.
2. What are the differences between the eye when the flashlight is shined in it with the light on and the light off?

3. Why is there a change with different light levels?
4. Does eye color affect the response of the pupil to the light change? Explain.
5. How accurate was your hypothesis?
6. Briefly explain other body functions that could demonstrate homeostasis of the human body? (at least 3)