



Observing the Behavior of Moths Near Different Light Sources

Name: _____ Date: _____

OBJECTIVE

To observe and compare how moths behave near different light sources.

HYPOTHESIS

I think moths will _____
near _____ light
because _____

MATERIALS

- 3 different light sources (example: white LED bulb, yellow lamp, flashlight)
- 3 dark-colored boxes or screens (or cardboard panels)
- Moths (observe outdoors at night)
- Timer or clock
- Notebook and pencil
- Optional: thermometer (to record temperature)

PROCEDURE

1. Go outside at night when it is dark.
2. Set up the 3 light sources at least 3 meters (10 feet) apart.
3. Place a dark-colored box or screen 1 meter (3 feet) behind each light source.
4. Stand back and give the moths a few minutes to find the lights.
5. For each light source, count the number of moths within a 1-meter area around the light and on the screen behind it.
6. Record your observations for 5 minutes.
7. Repeat 2 more times (three trials total).
8. Compare results and look for patterns in moth behavior.



SAFETY FIRST

Be outside with an adult. Do not touch the moths. Respect living creatures and the environment.

DATA TABLE

Light Source	Trial 1 (Number of Moths)		Trial 2 (Number of Moths)		Trial 3 (Number of Moths)		Average (Number of Moths)	
	Around Light	On Screen	Around Light	On Screen	Around Light	On Screen	Around Light	On Screen
1. White LED Bulb								
2. Yellow Lamp								
3. Flashlight								

OBSERVATIONS

Describe what you noticed about the moths near each light source.



ANALYSIS & QUESTIONS

1. Which light source attracted the most moths? _____
2. Which light source attracted the least moths? _____
3. Where did moths spend more time: around the light or on the screen? Why do you think that happened?

4. What other factors might affect moth behavior?

CONCLUSION

What did you learn from this experiment?

