

## Impacts of Conservation Measures

### Results BEFORE conservation measures (PAGES 1 AND 2 FROM DATA SHEETS)

- 1) Take total kwh use from bottom of page 1 and multiply by 365 to obtain yearly kwh use. (A)

Yearly kwh use = \_\_\_\_\_ = A

- 2) Use the cost per kilowatt hour (from your energy bill) to calculate yearly energy costs for lighting (B)

Yearly energy cost for lighting = A x cost per kilowatt hours = \_\_\_\_\_ = B

- 3) Add the total yearly cost of bulbs from bottom of page 2 to B to get total cost of lighting (C)

Total cost of lighting = total yearly cost of bulbs + B = \_\_\_\_\_ = C

### Results AFTER proposed conservation measures (PAGES 3 AND 4 FROM DATA SHEETS)

- 4) Take total kwh use from bottom of page 3 and multiply by 365 to obtain yearly kwh use. (D)

Yearly kwh use = \_\_\_\_\_ = D

- 5) Use the cost per kilowatt hour (from your energy bill) to calculate yearly energy costs for lighting (E)

Yearly energy cost for lighting = D x cost per kilowatt hours = \_\_\_\_\_ = E

- 6) Add the total yearly cost of bulbs from bottom of page 4 to E to get total cost of lighting (F)

Total cost of lighting = total yearly cost of bulbs + E = \_\_\_\_\_ = F

Savings due to proposed conservation measures = C-F = \_\_\_\_\_

- 7) Interpret your results by writing a short essay that answers the following questions.

- i. What conservation measures did you propose and why did you choose those measures?
- ii. Did the conservation measures have an impact on the yearly cost of lighting in your home?
- iii. Was the impact great enough to make you want to make these changes? Explain why or why not.

## **Expectations for Lighting Project**

- 1) Complete pages 1-4 from the data sheets using the directions provided in this packet. All entries in the final drafts of pages 1-4 must be typed.
- 2) Complete the “Impacts of Conservation Measures” page. All entries must be accurate and clearly written or typed.
- 3) Complete the Interpretation Essay (#7 on “Impacts of Conservation Measures” page). Essay must be typed.

Parts 1-3 must be turned in as a complete packet and in the following order:

Directions page  
Data Sheets pages 1-4  
Impacts of Conservation Page  
Interpretation Essay

Due Date is \_\_\_\_\_

Late Assignments will be accepted within one week of the assignment for a 20% point deduction. No assignments will be accepted after 7 days.

## **Assessment of Lighting Project**

Projects will be assessed upon the following criteria:

All expectations as described above are met.  
All work is shown on “Impacts of Conservation Measures” page  
All entries in data sheet are accurate and consistent  
The “After Conservation Measures” data sheets should reflect a reasonable effort to incorporate changes in both energy use and bulb type.  
The essay should be consistent with the changes made in the “After Conservation Measures” data sheets.  
Your rationale for making changes or not making changes in lighting should be based on valid reasoning and should be articulated clearly in the essay.

If all criteria are met and the assignment is turned in on time you will receive 100% for this project.  
Failure to meet any of the above criteria will result in a deduction from 100%.