

LED LIGHTBULB ENERGY SAVINGS WORKSHEET

Question: You replace ten 60W lightbulbs with 9W LED bulbs. They are on an average of 5 hours/day.

The Electric Utility rate is \$0.20/kWh. **What are the Total Savings? Load Reduction (kW) and**

Annual Energy Consumption (kWh)

1. Load Savings or Reduction PER BULB:

_____ Existing Watts/bulb - _____ LED Watts/bulb = _____ Watts Saved/bulb

> Convert Watts to Kilowatts (Watts/1000): _____ kW Saved/bulb

For example: 100W = 0.100 kW, 60W = 0.060 kW, 9W = 0.009 kW

2. TOTAL kW Saved: kW/bulb Saved X Number of bulbs

_____ kW saved/bulb X _____ # bulbs = _____ Total kW Savings

3. TOTAL Electric Consumption (kWh) Saved: Multiply by time by kW Saved

_____ hours/day X **365** days/year = _____ hours/year

_____ hours/year X _____ Total kW Saved = _____ kWh Savings/year

4. Annual Financial Savings: Multiply Annual kWh savings by electric rate/kWh

_____ kWh Savings/year X _____ \$/kWh = _____ \$ Savings/year