

Name: _____

Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet
Electric Power and Energy

A. Compute the energy consumption and energy cost of operating each appliance in the table given below. The energy consumption cost per kWh is ₱ 4.62. Item number 1 is done as your guide.

Appliances	Power Rating in Watts	Time of usage in Hours	Energy Consumption in kWh	Energy Consumption const in ₱
1. laptop	65	4	0.26	1.20
2. fridge	120	24		
3. LCD TV	200	10		
4. washing machine	3,000	2		
5. broadband router	10	24		

B. Solve the following problems using the power and energy equation. Write the complete solutions on the space provided. (2 points each)

1. A toaster on a 200 V line draws a current of 6 A. How much energy in kWh does it generate in 20 min?

2. What is the total amount of energy consumed in kW by two 100 W lamps and six 50 W lamps if these are used for 30 days at an average of 5 h per day?

3. How much does it cost per week to operate a stereo for 3 h per day if it draws 16 A on a 150 V line and the charge is ₱ 1.09 per kWh?