

NAME \_\_\_\_\_

CLASS/DATE \_\_\_\_\_



# Classroom Audit Worksheet

## Hair Dryer Example

- When the hair dryer is turned on it uses (A) \_\_\_\_\_ watts.
- We use the hair dryer (B) \_\_\_\_\_ minutes every week.
- This means the hair dryer is on (C) \_\_\_\_\_ hours every year (B x 52 weeks)/60 minutes.
- When the hair dryer is on it uses (D) \_\_\_\_\_ kWh/year (A x C)/1000.
- It costs (E) \$ \_\_\_\_\_ to use the hair dryer every year (D x \$0.12)  
[use \$0.12 cents per kWh].

Complete the following chart with using the hair dryer example:

- Identify other electric devices in the classroom and use the watt meter to determine the wattage.
- With a partner or in groups determine a reasonable minutes/week value.
- Complete the following chart for the other identified classroom devices.

## Classroom Electric Devices (Plug Load)- Cost to Operate

Device	(A) Watts while on	(B) Minutes on/week	(C) Hours on/year	(D) kWh/year (A x C)/1000	(E) Cost/year D x .12
Hair Dryer					\$

# Vocabulary



**Electricity** – A type of energy that can build up in one place or flow from one place to another. Electrical power is measured in watts, or kilo-watts (kW).

**Electrical energy** - Using electrical power to do work, over time. Electrical energy is measured in kilowatt-hours (kWh).

**Energy audit** – A survey and analysis of how a building or device uses energy.

**Energy conservation** – Using less energy with the same devices or equipment, typically by using them less or turning them off when not in use.

**Energy efficiency** – Using less energy by replacing old devices with newer equipment or technology.

**Kilowatt-hour** – Using one thousand watts (1 kW) of electrical power for one hour. Electric utilities bill their customers for every kWh used.

**Plug load** – The electrical energy used by things that are plugged into the wall.

**Watt meter** – A tool for measuring how much electrical power (watts) anything plugged into the wall is using.

