**Classroom Audit Worksheet**

**DVD Player Example**

**Energy ON**
- When the DVD Player is turned on it uses (A) _____ watts.
- We use the DVD player (B) _____ minutes every week.
- This means the DVD player is on (C)____ hours every year (B x 52 weeks)/60 minutes.
- When the DVD is on it uses (D)_______ kWh/year (A x C)/1000.
- It costs (E) $ _______ to use the DVD player every year (D x $0.12) [Electricity costs about $0.12 cents per kWh].

**Energy OFF**
- When the DVD is off it uses (F) _____ watts (vampire load).
- Hours per year the DVD is not in use (G)____ (8760 – C) [there are 8760 hours in one year].
- When the DVD player is off it uses (H) _____ kWh/year (F x G)/1000.
- The DVD vampire load costs us (I) $ _____ every year (H x $0.12).

Complete the following chart using the DVD player example:

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

**Classroom Electric Devices (Vampire Load) – Cost to Operate**

<table>
<thead>
<tr>
<th>Device</th>
<th>(A) Watts on</th>
<th>(B) Minutes on/week</th>
<th>(C) Hours on/year (B x 52)/60</th>
<th>(D) kWh/year on (A x C)/1000</th>
<th>(E) Cost/year on D x $0.12</th>
<th>(F) Watts off (Vampire Load)</th>
<th>(G) Hours off (8760-C)</th>
<th>(H) Off kWh (F x G)/1000</th>
<th>(I) Cost Off (Vampire Load) (H x $0.12)</th>
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</thead>
<tbody>
<tr>
<td>DVD Player</td>
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</table>
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 home or classroom 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 an outlet.

**Vampire load** – The electricity used by device when you are not even using it.

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