

Vocabulary: Household Energy Usage



Vocabulary

- **Current** – the flow of electrical charge.
 - In a metal wire, current is the flow of negatively charged particles (electrons).
 - Current is measured in *amperes* (A).
 - In equations, the symbol for current is *I*.
- **Energy consumption** – the amount of energy that is used.
 - The unit of energy consumption used in this Gizmo™ is the *kilowatt-hour*, or kWh. A 60-watt light bulb consumes 0.06 kilowatt-hours of energy in one hour.
 - To calculate energy consumption, multiply *wattage* by *usage*.
- **Fluorescent lamp** – a light source that consists of a glass tube coated with phosphor and filled with argon and another inert gas.
 - When an electric current flows through a fluorescent lamp, the gases emit ultraviolet radiation. This radiation excites the phosphors, which then emit light.
- **Halogen lamp** – a type of incandescent lamp in which the tungsten filament is encased in a capsule containing a mixture of gases that allow it to operate at a high temperature.
- **Incandescent lamp** – a standard light bulb.
 - An electrical current passes through a thin tungsten filament, causing it to glow and give off light.
 - The tungsten filament produces a lot of heat as well as light. Because of this, incandescent lamps are less efficient than fluorescent lamps.
- **Lumen** – a measure of the light produced by a lamp.
 - A lumen is equal to the amount of light produced by a single candle.
 - A standard 60-watt incandescent bulb produces about 800 lumens of light.
- **Usage** – the amount of time an electrical device is used.
- **Voltage** – a measure of electrical potential energy.
 - Just as pressure causes water to flow through a pipe, voltage can be thought of as “electrical pressure” that causes electrical charge to flow through a circuit.
 - Voltage is measured in *volts* (V).
 - In equations, the symbol for voltage is *V*.
- **Wattage** – the electrical power consumed by a device.
 - Units of wattage include the watt (W) and kilowatt (kW). A kilowatt is 1,000 watts.