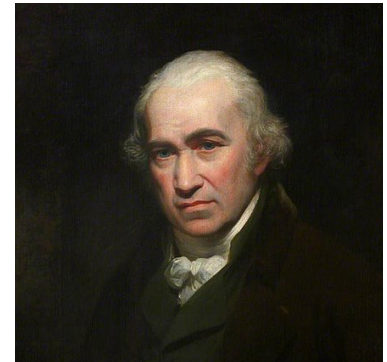


A Watt by Any Other Name...



...WOULD STILL BE A MEASURE OF ELECTRICITY.

A **Watt** is an instantaneous measure of electric energy named after James Watt. Since the term Watt is based on a person's name, it is always capitalized. A Watt can measure energy generated or energy consumed. Electricity generated or consumed over time is measured in Watt-hours. For example a 60 Watt light bulb that is on for 2-hours consumes 120 Watt-hours of electricity.




 \times 6 hours = 120 Watt-hours of electricity

Watt: Base unit of measurement. Abbreviated W for Demand / Wh for Consumption

Examples: Lightbulbs, small appliances, cell phone battery chargers



Powers:



Kilowatt: 1,000 Watts. Abbreviated kW for Demand / kWh for Consumption

Examples: The average U.S. home load is 1.24 KW or ~11,000 kWh annually



Powers:



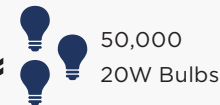
1 U.S. Home

Megawatt: 1,000,000 Watts. Abbreviated MW for Demand / MWh for Consumption

Example: Capacity of utility scale power plants is usually measured in MW.



Powers:



800 U.S. Homes

Gigawatt: 1,000,000,000 Watts. Abbreviated GW for Demand / GWh for Consumption

Example: The electric generation capacity of U.S. states is usually measured in GW.



Powers:



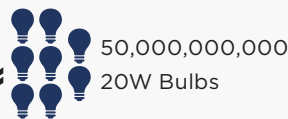
800,000 U.S. Homes

Terawatt: 1,000,000,000,000 Watts. Abbreviated TW for Demand / TWh for Consumption

Example: The electric generation capacity of nation states is usually measured in TW.



Powers:



800,000,000 U.S. Homes

A DIFFERENT PERSPECTIVE: How long would each order of magnitude be if 1 Watt = 1 Second?

1 Watt = 1 Second



1 Gigawatt ≈ 32 Years



1 Kilowatt ≈ 17 minutes



1 Terawatt ≈ 31,710 Years... That's 5x older that the Pyramids of Giza or approximately 3/4 of the time it will take Voyager 1 to reach Proxima Centauri (the closest star outside our solar system)



1 Megawatt ≈ 12 Days