

Name: _____

Home Energy Audit



Procedure:

- 1) Choose one room in your house for your audit, the room should have at least 5 electricity consuming appliances/utilities
- 2) Determine the wattage for each of the powered appliances, you can use the internet or the chart provided
- 3) Record an estimate for the daily usage of each appliance in hours, as well as its standby time if it leaks electricity
- 4) Fill out the energy use table, remembering
$$\text{Energy (Wh)} = \text{Power (W)} \times \text{Time (h)}$$
- 5) Act out the cost of Electricity by calculating the number of jumping jacks owed for the energy expenditure and start jumping!

Appliance Wattages:

Essentials:	
Light Bulb - 60 Watt	60
Light Bulb - 75 Watt	75
Refrigerator/Freezer	700
Sump Pump - 1/3 HP	800
Sump Pump - 1/2 HP	1050
Water Well Pump - 1/3 HP	1000
Electric Water Heater	4000
Heating/Cooling:	
Space Heater	1800
Humidifier - 13 Gal	175
Furnace Fan Blower - 1/2 HP	800
Furnace Fan Blower - 1/3 HP	700
Window AC - 10,000 BTU	1200
Window AC - 12,000 BTU	3250
Central AC - 10,000 BTU	1500
Central AC - 24,000 BTU	3800
Central AC - 40,000 BTU	6000
Heat Pump	4700
Laundry Room:	
Iron	1200
Washing Machine	1150

Clothes Dryer - Electric	5400
Clothes Dryer - Gas	700
Kitchen:	
Microwave Oven - 625 Watts	625
Microwave Oven - 1000 Watts	1000
Coffee Maker	1000
Electric Stove - 8" Element	2100
Dishwasher - Hot Dry	1500
Food Processor	400
Toaster Oven	1200
Toaster	850
Electric Can Opener	168
Family Room:	
VCR	100
Stereo Receiver	450
Color TV - 27"	500
X-Box, Game Cube, Playstation	40
Other:	
Security System	500
1/2 HP Garage Door Opener	875
Curling Iron	1500
Hair Dryer - 1250 Watt	1250

Outdoors/Hiking/Camping:	
Electric Grill	1650
AM/FM Radio	100
CD/DVD Player	100
Box Fan - 20"	200
Office Equipment:	
Personal Computer w/ 17" Monitor	800
Fax Machine	65
Laser Printer	950
Inkjet Printer	80
Copy Machine	1600
Color TV - 13"	150
Outdoor Light String	250
Cell Phone Battery Charger	25
Inflator Pump	50

Links:

<https://unboundsolar.com/solar-information/power-table>

Standby Wattages:

	Average
Audio	
Portable Stereo	2.2
Compact system	9.7
Component System	3.0
Radio	1.7
Video	
TV	4.5
VCR	5.9
TV/VCR	7.6
Set-top	
Cable Box	10.8
Satellite Receiver	12.6
Video Game	1.3
Telephony	
Answering Machine	3.0
Cordless Phone	2.6
Home Office	
Personal Computer	1.7
Modem, analog	1.4

Links:

<https://standby.lbl.gov/data/summary-table/>

<https://uselessenergy.wordpress.com/>

Orange	White	White	Blue	Yellow	Yellow	Green
Orange	White	White	Blue	Yellow	Yellow	Green