Electricity use worksheet

Address: _____ Calculated by: _____ Date: _____

Electrical device	Wattage[a] (volts × amps = watts)	×	Number of hours used per day	×	Number of days used per year	=	Watt-hours used per year	Divide by 1,000 = kWh	Kilowatt-hours (kWh) used per year
Example: flat-screen TV	120 watts	×	2	×	269	=	64,560	64,560 ÷ 1,000	64.56 kWh
Example: dishwasher (not using the drying feature)	1,200 watts	×	1	×	104	=	124,800	124,800 ÷ 1,000	124.8 kWh
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	

Electrical device	Wattage[a]	×	Hours used per day	×	Days used per year	=	Watt-hours	÷ 1,000	kWh used per year
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
		×		×		=		÷ 1,000	
Total kilowatt-hours (kWh) used per year									
Divide by 12 to determine average kWh used per month. Use this number for the exercises in the *System Sizing* guide.									

[a] An electrical device has a metal plate or sticker showing **wattage** on or near the back or side. If not shown, multiply the amperes (amps) by the voltage to get wattage. Most U.S. appliances use 120 volts. Larger appliances (electric clothes dryers and cooktops) use 240 volts.

- **Refrigerators**: Because they cycle on and off to maintain a set temperature, divide the total time the refrigerator is plugged in by three.
- **Phantom loads** are electrical loads used by devices even when they are turned off. These loads can increase a device's consumption by up to 15 watts. Avoid this unnecessary standby consumption by unplugging electronics and appliances when not in use or by plugging them into a surge protector and using its on/off switch.

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