Wisconsin K-12 Energy Education Program (KEEP)
College of Natural Resources
University of Wisconsin-Stevens Point

Watts Your Appliance?

Summary: Students try to guess which appliances use the most energy and discuss the results.

Background: Calculating how much energy is used by the electrical appliances and equipment in our homes and schools makes us aware of which ones use large amounts of energy and which ones don't. This can lead us to adopt strategies for using appliances and equipment more efficiently and prompt us to buy new, more efficient appliances and equipment when older ones need to be replaced.

Most appliances list the wattage used on the bottom or back of the nameplate. Sometimes they use more or less energy than is listed depending on how long the appliance is in use, when it is cycling, or when it is only using stand-by power.

For more information, visit *Estimating Appliance and Home Electronic Energy Use*.

What to do: Print or copy the following pages *back to back* (ex: Page 1A and Page 1B should be back to back). Cut out the cards so you can tape them shut with the wattage on the inside so the students can't see it. Instruct students to talk to each other and line the appliances up in order of lowest wattage to highest. Then have them open the cards and discuss why certain items are higher or lower than they guessed.

Want more?: Want to find out exactly how much energy your appliances are using, and calculate their energy cost? Check out a Watts Up? Meter Kit from the WCEE Resource Library! You can also check your local library, or contact your local utility to see if they have one you can borrow.

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		Window Fan
		Personal Computer and 17” CRT Monitor (in use)
		Clock Radio
		Coffee Maker

	55–250 Watts
	270 Watts
	10 Watts
	900–1200 Watts

		Clothes Washer (Top-loader with cold water wash)	
		Clothes Dryer (electric)	
		Dishwasher (without heated dry)	
		Dehumidifier	

	350–500 Watts
	1800–5000 Watts
	1200–2400 Watts (using the drying feature and having the dishwasher heat the water greatly increases energy consumption)
	785 Watts

	Electric Blanket **Single/Double**
	Ceiling Fan
	Hair Dryer
	Clothes Iron

	60/100 Watts
	65-175 Watts
	1200–1875 Watts
	1000–1800 Watts

	Microwave Oven
	Refrigerator **(frost free, 16 cubic feet)**
	Television **(42 inch LCD)**
	Toaster

	750–1100 Watts
	57-725 Watts (when the compressor is running it uses more energy)
	176 Watts
	800–1440 Watts

		Toaster Oven
		HD TV Set-Top Box with DVR
		DVD
		Vacuum Cleaner

	1225 Watts
	275-446 Watts
	20–25 Watts
	1000–1440 Watts

	Water Heater **(40 Gallon electric)**
	Water Pump **(deep well)**
	iPhone Charger
	Laptop Computer

	4500–5500 Watts
	250–1100 Watts
	5 Watts
	50 Watts