

HOW MANY WATTS?



Ten minutes in an electric shower.

Ten minutes in an electric shower

1500 watts

An average electric shower has a power rating of 9000w (9kw). This means it would use:

9000w in 1 hour

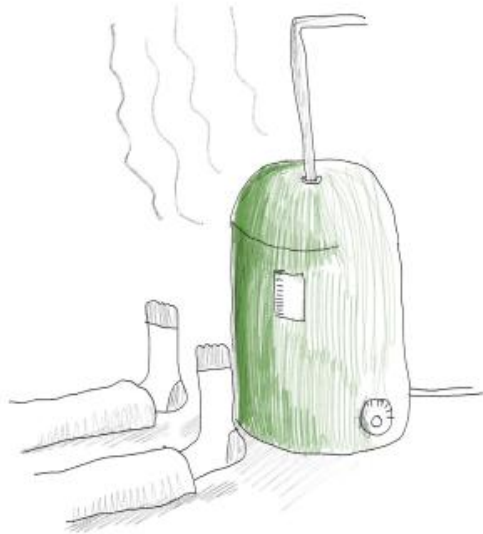
$9000w/60 = 150w$ in 1 minute

$150w \times 10 = 1500w$ in 10 minutes

Tips for using less energy:

- ⚡ Take shorter showers
- ⚡ Reduce the temperature
- ⚡ Removing limescale from shower head will make it more efficient

HOW MANY WATTS?



Running an immersion heater for 1 hour.

Running an immersion heater for 1 hour

3000 watts

An immersion heater has a power rating of around 3000w (3kw). This means it would use:

3000w in 1 hour

Tips for using less energy:

- ⚡ Switch your immersion heater on about 1 hour before you need the hot water – they take about 45 minutes to heat up in summer and 70 minutes in winter
- ⚡ Make sure your immersion heater is well insulated – jackets cost around £20 and can save you £70 a year

HOW MANY WATTS?



To boil 1.7 litres of water in a kettle (enough for 6 cups of tea).

To boil 1.7 litres of water in a kettle (enough for 6 cups of tea)

200_{watts}

An average kettle has a power rating of 3000w (3kw). It takes about 4 minutes to boil 1.7 litres of water. This means it would use:

3000w in 1 hour

$3000w/60 = 50w$ in 1 minute

$50w \times 4 = 200w$ in 4 minutes

Tips for using less energy:

- ⚡ Don't put more water in the kettle than you need
- ⚡ The more water you add, the longer it takes to boil

HOW MANY WATTS?



Reheating a pie in a microwave.

Reheating a pie in a microwave.

75 watts

An average microwave has a power rating of 900w. It takes about 5 minutes to reheat a pie. This means it would use:

900w in 1 hour

$900w/60 = 15w$ in 1 minute

$15w \times 5 = 75w$ in 5 minutes

Tips for using less energy:

- ⚡ Microwaves are cheaper to use than conventional ovens, but some tips to save even more:
- ⚡ Unplug when not in use
- ⚡ Defrost frozen foods in the refrigerator to save using microwave
- ⚡ Keep surfaces inside clean

HOW MANY WATTS?



Reheating a pie in an electric oven.

Reheating a pie in an electric oven

833 watts

A conventional oven has a power rating of around 2000w. It takes about 25 minutes to reheat a pie. This means it would use:

2000w in 1 hour

$2000w/60 = 33w$ in 1 minute

$33w \times 25 = 833w$ in 25 minutes

Tips for using less energy:

- ⚡ Ovens are more efficient if air can flow freely around items – stagger pots on top and bottom shelves
- ⚡ Smaller pans are more efficient

HOW MANY WATTS?



Reheating a pie in an air fryer

Reheating a pie in an air fryer

255 watts

A smallish air fryer has a power rating of 1000w. It takes about 15 minutes to reheat a pie. This means it would use:

1000w in 1 hour

$1000w/60 = 17w$ in 1 minute

$17w \times 15 = 255w$ in 15 minutes

Tips for using less energy:

- ◀ Air fryers are cheaper to run than conventional ovens and perfect for small items like jacket potatoes and pies

HOW MANY WATTS?



Mowing a lawn with an electric mower for 1 hour.

Mowing a lawn with an electric mower for 1 hour

1000 watts

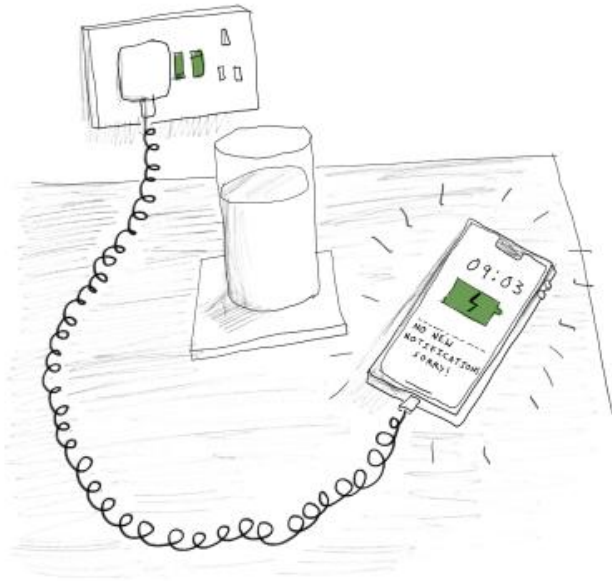
An average lawnmower has a power rating of 1000w. This means it would use:

1000w in 1 hour

Tips for using less energy:

- ⚡ Electric mowers are more energy efficient than petrol mowers, but if you are fit enough to use a manual mower, you will save even more money and get more exercise
- ⚡ Consider not mowing your lawn during May – it's good for the bees

HOW MANY WATTS?



**Charging your phone
for 2 hours.**

**Charging your phone
for 2 hours**

5 watts

An average phone charger has a power rating of 2.5w. This means it would use:

2.5w in 1 hour

$2.5w \times 2 = 5w$ in 2 hours

Tips for using less energy:

- ⚡ Don't leave your phone charging longer than needed
- ⚡ Try plugging your phone into a timer so they shut off automatically

HOW MANY WATTS?



**An LED light
left on for 5 hours.**

**An LED light
left on for 5 hours**

20 watts

An average LED light has a power rating of 4w. This means it would use:

4w in 1 hour

$4w \times 5 = 20w$ in 5 hours

Tips for using less energy:

- ⚡ LED lights are the most efficient form of lighting – by comparison, halogen lamps would use approximately 200 watts in 5 hours.

HOW MANY WATTS?



**An incandescent light
left on for 5 hours.**

**An incandescent light
left on for 5 hours**

300 watts

An old-fashioned incandescent light has an average power rating of 60w. This means it would use:

60w in 1 hour

$60w \times 5 = 300w$ in 5 hours

Tips for using less energy:

- ⚡ Consider replacing your incandescent light bulbs with LED bulbs. These will use less energy and also less heat, which makes them safer. They also last a lot longer.
- ⚡ Light bulbs vary in quality and life span. Use branded light bulbs, if possible.

HOW MANY WATTS?



Using a dishwasher to clean a full load.

Using a dishwasher to clean a full load

910 watts

Dishwashers vary greatly in power settings and the length of wash cycles. A typical dishwasher uses:

910w to clean a full load

Tips for using less energy:

- ⚡ The energy rating of dishwashers varies greatly. The most energy efficient dishwashers use 540 watts per cycle – when buying a dishwasher, check the energy rating, as well as the amount of water different models use.
- ⚡ If you already have a dishwasher, find out which settings use the least electricity

HOW MANY WATTS?



Using a desktop computer for 4 hours.

Using a desktop computer for 4 hours

560_{watts}

An average desktop computer has a power rating of 140w. This means it would use:

140w in 1 hour

$140w \times 4 = 560w$ in 4 hours

Tips for using less energy:

- ⚡ Enable the sleep mode on your monitor, if you aren't going to use your computer for 20 minutes, or more.
- ⚡ Switch off plugs when you are not using your computer for more than 2 hours

HOW MANY WATTS?



**Using a laptop computer
for 4 hours.**

**Using a laptop computer
for 4 hours**

200 watts

An average laptop computer has a power rating of 140w.
This means it would use:

50w in 1 hour

$50w \times 4 = 200w$ in 4 hours

Tips for using less energy:

- ⚡ Enable the sleep mod, if you aren't going to use your computer for 20 minutes, or more.
- ⚡ Switch off plugs when you are not using your computer for more than 2 hours

HOW MANY WATTS?



A washing machine running for 1 hour.

A washing machine running for 1 hour

2100 watts

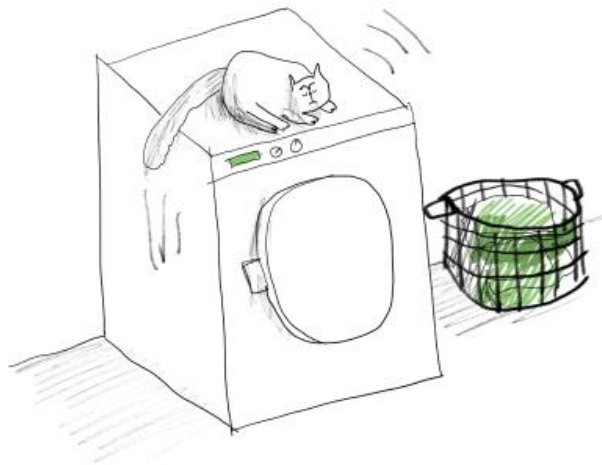
A washing machine has a power rating of around 2100w. This means it would use:

2100w in 1 hour

Tips for using less energy:

- ⚡ When buying a new washing machine, look for one that has a high energy efficiency, eg AAA
- ⚡ Wait for a full load (but don't overload)
- ⚡ Wash at lower temperatures
- ⚡ Pre-soak stains to reduce the need to rewash
- ⚡ Use eco mode, if available

HOW MANY WATTS?



**A tumble dryer running
for 1 hour.**

**A tumble dryer running
for 1 hour**

2500 watts

An average tumble dryer has a power rating of 2500w.
This means it would use:

2500w in 1 hour

Tips for using less energy:

- ⚡ If possible, hang your washing outside to dry
- ⚡ Use a high spin speed in your wash, to remove more water and save drying time

HOW MANY WATTS?



One hour of ironing!

One hour of ironing

1500 watts

An average iron has a power rating of 1500w. This means it would use:

1500w in 1 hour

Tips for using less energy:

- ⚡ Try to reduce the amount of clothes that need ironing.
- ⚡ Pull clothes gently into shape while they are still damp.
- ⚡ Wear wrinkly clothes with pride

HOW MANY WATTS?



Toasting 2 slices of bread.

Toasting 2 slices of bread

34 watts

A 2-slice toaster has an average power rating of 1000w. It takes about 2 minutes to toast bread in an electric toaster. This means it would use:

1000w in 1 hour

$1000w/60 = 17w$ in 1 minute

$17w \times 2 = 34w$ in 2 minutes

Tips for using less energy:

- ⚡ Clean your toaster regularly and remove crumbs to ensure proper air flow and greater efficiency
- ⚡ Work out how long it takes to toast bread the way you like it – and avoid burned toast

HOW MANY WATTS?



**Using an electric blanket
for 30 minutes.**

**Using an electric blanket
for 30 minutes**

75 watts

An electric blanket has a power rating of around 150w.
This means it would use:

150w in 1 hour

$150w/60 = 2.5w$ in 1 minute

$2.5w \times 30 = 75w$ in 30 minutes

Tips for using less energy:

- ⚡ Don't leave your electric blanket on for too long.
- ⚡ Heating it for 20-30 minutes before you get into bed is the recommended way to use one.

HOW MANY WATTS?



Heat energy lost through your walls in 1 hour, when it is 0°C outside.

Heat energy lost through your walls in 1 hour, when it is 0°C outside.

2000 watts

The amount of heat lost through the walls of an average house is about 100watts per degree of temperature difference. If you are heating your house to 20oC and it is 0oC outside, the temperature difference is 20oC.

$$20 \times 100w = 2000 w$$

Tips for using less energy:

- ⋄ If your wall is well insulated, you will lose less energy.
- ⋄ You also lose heat through draughts: holes and gaps around doors and windows. Blocking these draughts is usually cheaper than adding insulation.

HOW MANY WATTS?



An oil-filled radiator running for 2 hours.

An oil-filled radiator running for 2 hours

4000_{watts}

An oil-filled radiator has a power rating of around 2000w. This means it would use:

2000w in 1 hour

2000w x 2= 4000w in 2 hours

Tips for using less energy:

⚡ Choose low power settings

HOW MANY WATTS?



An electric heater running for 2 hours.

An electric heater running for 2 hours

5000_{watts}

An electric heater has a power rating of around 2500w. This means it would use:

2500w in 1 hour

$2500w \times 2 = 5000w$ in 2 hours

Tips for using less energy:

- ⚡ Keep doors closed
- ⚡ Use draught excluders

HOW MANY WATTS?



A fridge freezer running for 8 hours.

A fridge freezer running for 8 hours

2400_{watts}

A fridge freezer has a power rating of around 300w. This means it would use:

300w in 1 hour

$300w \times 8 = 2400w$ in 8 hours

Tips for using less energy:

- ⚡ A modern fridge freezer won't be running at full power all the time. If the temperature inside is cool enough it will use very little energy
- ⚡ Keep the door(s) shut as much as possible
- ⚡ Smaller fridge freezers use less power than larger ones with the same energy rating

HOW MANY WATTS?



Heat energy lost through your windows in 1 hour when it is 0°C outside

Heat energy lost through your windows in 1 hour when it is 0°C outside

600 watts

The amount of heat lost through the windows of an average house is about 30watts per degree of temperature difference. If you are heating your house to 20°C and it is 0°C outside, the temperature difference is 20°C.

$$20 \times 30 = 600 \text{ w}$$

Tips for saving energy:

- ⚡ How much heat is lost depends on how big your windows are (the total area) and how energy efficient they are. Buying more efficient windows will save you energy, but can be very expensive.
- ⚡ Curtains and blinds are effective ways to reduce heat lost after dark.
- ⚡ Secondary glazing, for example removable perspex sheets, is a cost effective solution for winter months.

HOW MANY WATTS?



Heat energy lost through your roof in 1 hour when it is 0°C outside

Heat energy lost through your roof in 1 hour when it is 0°C outside

1400 watts

The amount of heat lost through the roof of an average house is about 70watts per degree of temperature difference. If you are heating your house to 20°C and it is 0°C outside, the temperature difference is 20°C.

$$20 \times 70 = 1400 \text{ w}$$

Tips for saving energy:

- ⚡ Roof and loft insulation is quick to install and will keep more heat in your home
- ⚡ Compared to other types of insulation, it is relatively cheap and will reduce your energy bills significantly

HOW MANY WATTS?



Heat energy lost through doors and draughts in 1 hour when it is 0°C outside

Heat energy lost through doors and draughts in 1 hour when it is 0°C outside

840 watts

The amount of heat lost through doors and draughts of an average house is about 42 watts per degree of temperature difference. If you are heating your house to 20°C and it is 0°C outside, the temperature difference is 20°C.

$$20 \times 42 = 840 \text{ w}$$

Tips for saving energy:

- ⋄ Draught proofing is one of the cheapest and most effective ways to save energy and money in your home.
- ⋄ Ventilation is important for your health, but you should be able to control when fresh air is let in.
- ⋄ Draughts make you feel cold and uncomfortable. By removing draughts you may also be able to turn down your thermostat. More money saved!
- ⋄ Blocking up gaps around windows and doors can save around £35 a year.