

HOME ENERGY NAVIGATOR



1. Go around your home and find things that use electricity.
2. Most appliances have writing on them that tells you how much energy they use. Look for a number followed by the **W** (for **Watts**) and write it down. *Good places to look are close to the electric cord, under the device, behind the device or on the battery.*
3. Calculate the **power** these use in kilowatt-hours (kWh). Do this by multiplying the watts you found by 1 hour and dividing by 1000.
4. Estimate how many hours you use the device during a month
5. Calculate monthly **power use**. Do this by multiplying the power per hour times estimated hours device is on in a month.
6. Calculate how much this costs during a month. Do this by multiplying the power (kWh) by the standard residential rate of \$0.148/kWh.

Appliance/Electronic	Energy use (W)	Power use (kWh)	Estimated hours' device is running per month (30 days)	Monthly power use	Monthly Cost (multiply by \$0.148/kWh)
<i>Example: MacBook Pro Charger</i>	85 W	$85W \times 1h / 1000 =$ 0.085kWh	$10 h \text{ per day} \times 30\text{day} =$ 300 h	$0.085kWh \times 300h =$ 25.5 kWh	$25.5kWh \times \$0.148/kWh =$ \$3.774
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2.					
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6.					
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CURRICULUM OUTCOMES

Grade 6 Mathematics:

Outcome N02: Students will be expected to solve problems involving whole numbers and decimal numbers

Grade 6 Science:

Consumption and Conservation:

Describe how our actions could lead to reducing electrical energy consumption in your environment (108-5, 108-8, 303-30, 106-3)

Grade 7 Mathematics:

SCO N02: Students will be expected to demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals to solve problems (for more than one-digit divisors or more than two-digit multipliers, the use of technology is expected).