

Guess the Watts!

There are many appliances that we commonly use in our daily routines, but how much energy does each appliance use? This activity is a guessing game for the *average* relative energy consumption for common appliances in your home!

Suitable for ages: 7 and up

Curriculum links:

- Grade 1 to 6 – Science Inquiry (<https://education.alberta.ca/media/159711/elemsci.pdf>)
- Grade 5 – Electricity and Magnetism (<https://education.alberta.ca/media/159711/elemsci.pdf>)

Instructions

What you will need checklist:

- Scissors

Instructions:

1. Cut along the lines of the worksheet provided to create individual rectangular pieces with different appliances on them.
2. Once all squares are cut out, try to put the appliances in order from requiring the most amount of energy (in watts) to the least.
3. Check your answers using the answer key below!

Post-Activity questions to consider:

1. Were you surprised with the answers?
2. Do you use the higher ranked appliances often? How about the lower ranked appliances?
3. Are there other alternatives you can think of instead of using these appliances?
4. What types of energy do these appliances utilize (non-renewable, renewable)?
5. How do you think these values would differ with energy efficient appliances? (Grade 5)

Did you know?

Lightening is also a source of energy, it is potential energy that is transformed into light and sound!

Share with us!

We would love to see photos of your low-waste crafts and activities at home. Feel free to tag us or hashtag #GreenCalgary in your social media posts! Find us here:



 <p>Dishwasher running for 1 hour</p>	 <p>Printer printing for 15 minutes</p>	 <p>Fridge running for 24 hours</p>	 <p>Laptop computer charging for 6 hours</p>
 <p>Phone charging for 3 hours</p>	 <p>Microwave heating for 30 minutes</p>	 <p>Dryer drying clothes for 15 minutes</p>	 <p>Incandescent light bulbs on for 5 hours</p>
 <p>Hair dryer on for 10 minutes</p>	 <p>LED light bulb on for 5 hours</p>	 <p>Air conditioning cooling for 3 hours</p>	 <p>Oven on for 1 hour</p>



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Answer Key

Order for energy usage of appliances (highest to lowest):

1. Dryer for 15 mins = 3000 watts
2. Oven for 1 hour = 2400 watts
3. Dishwasher for 1 hour = 1800 watts
4. hair dryer for 10 mins = 1500 watts
5. Microwave for 30 mins = 1200 watts
6. Air conditioner for 3 hours = 1000 watts
7. Fridge for 24 hours = 180 watts
8. Laptop when plugged in for 6 hours = 60 watts
9. Incandescent light bulb for 5 hours = 60 watts
10. Printer for 15 mins = 40 watts
11. LED light bulb for 5 hours = 10 watts
12. Phone charger for 3 hours = 5 watts

Information source: <http://energyusecalculator.com>