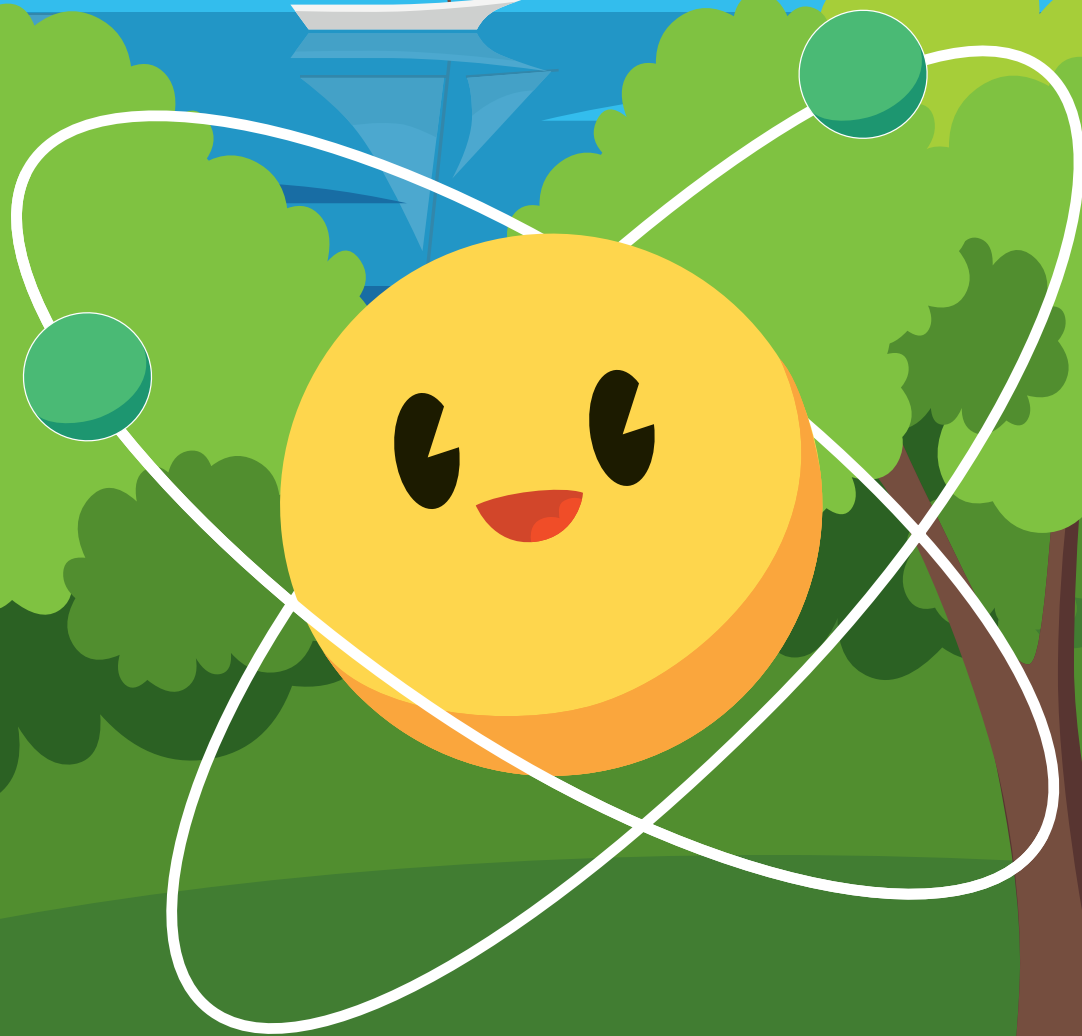


# READY FOR AN ADVENTURE?

Lumi needs help searching for ways to save energy.

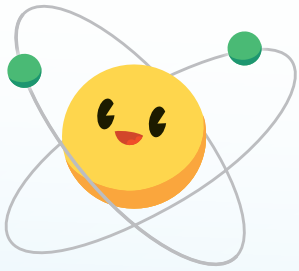


**BGE**

An Exelon Company

**EmPOWER**  
MARYLAND

# Let's go on an adventure!



Hi! I'm Lumi<sup>SM</sup>, your virtual energy coach. Will you help me track down all the ways I can conserve energy to be more energy efficient?

## Simple changes can make a BIG impact.

I want to help you make choices to be energy smart in your home, school, and even while playing. Some things only your parents can do, but there are lots of ways you can help out too.

### First, do you know what energy is?

Energy is the power behind making things work like your lights, air conditioning, microwave, televisions, computers, phones, and tablets! The energy is created in different ways and then changed into electric energy.

### I'll bet you're wondering where energy comes from?

Electricity begins with atoms. You can't see atoms, but they are tiny little particles that make up everything around us. The center of every atom contains things called protons, neutrons, and electrons.

Electrons are very active—moving quickly around the center of the atom. Power plants can force electrons to move between different atoms. This movement of electrons from atom to atom creates electricity—and that's the energy that you ultimately use to turn on your lights and cool your homes.

### Energy is there all the time!

Anything that is plugged in is using energy - even when turned off! This is called **phantom energy**. A lot of energy is wasted when we don't unplug unnecessary electronics.

As your virtual energy coach, I want to help you learn good energy savings habits so you can start making a difference now - and help others do the same! When we reach the end of our adventure you'll know even more about where energy comes from. You'll be able to show your family how using less energy saves money every single month! And, you'll be saving our natural resources which keep the earth safe and beautiful.

## FUN FACTS

### ⚡ Charge yourself up!

When electricity gathers in one place and doesn't move, it's called static electricity. This happens when you rub things together. Try rubbing a balloon across your clothes. It will stick to you because you just charged yourself up with static electricity!

### ⚡ As fast as light!

Electricity travels at the speed of light, which is 186,000 miles per second. If you could travel as fast as electricity, you could go around the earth 7 times in 1 second. Now that's fast!

### ⚡ What's a watt?

A watt is a unit of measure that tells you how fast the electrons inside electricity are moving around. When you know how many watts you use you can calculate how much it costs to power all your devices, appliances, and lights in your home.



# One COOL idea!

Did you know that opening and closing the refrigerator door uses more energy to keep the temperature inside cool?

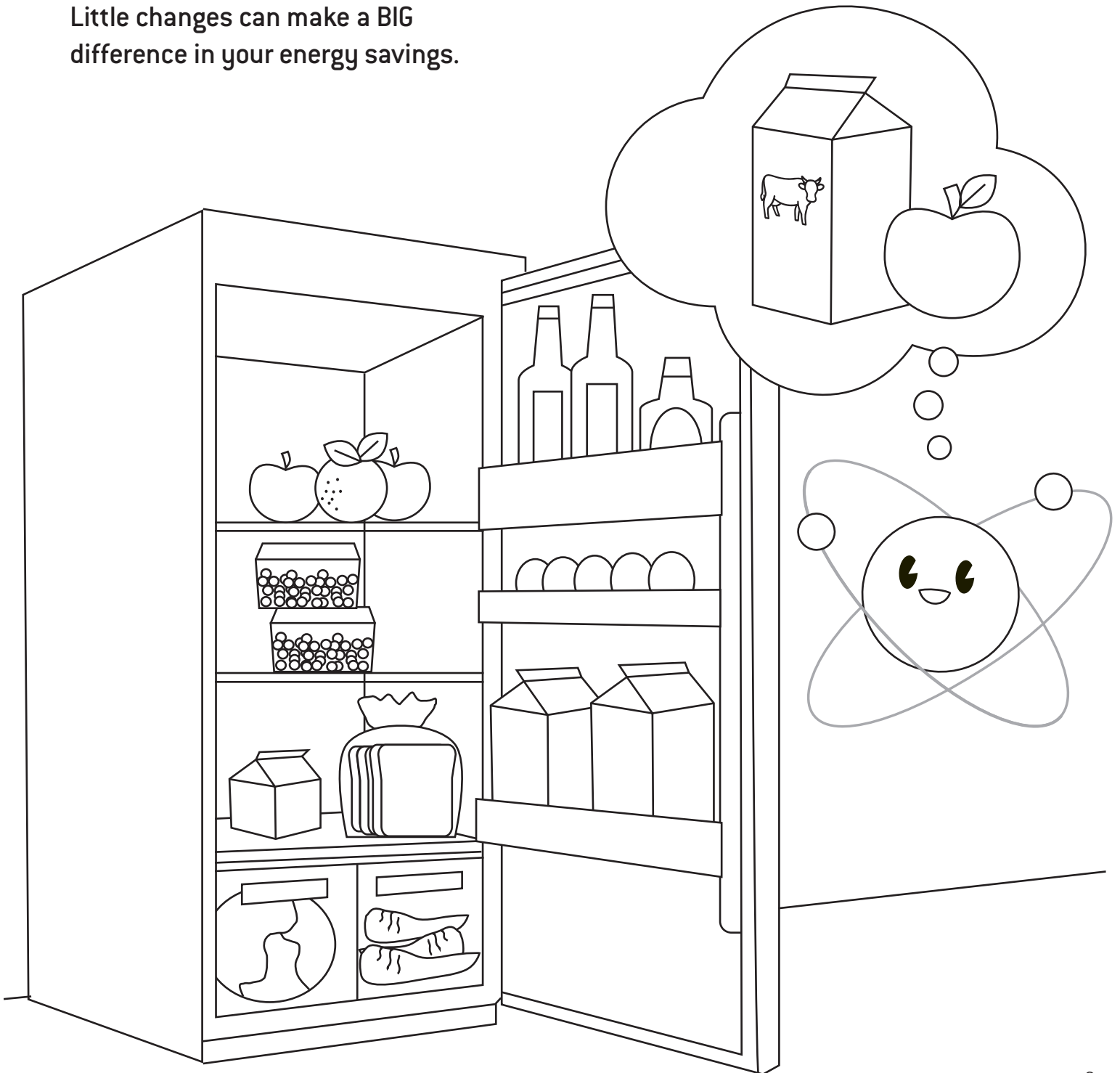
Little changes can make a BIG difference in your energy savings.



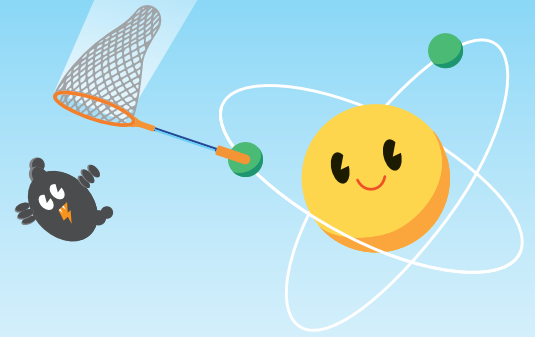
If you are making your lunch, get all the ingredients out of the fridge at the same time.



If you just want a snack, know what you want before opening the door.



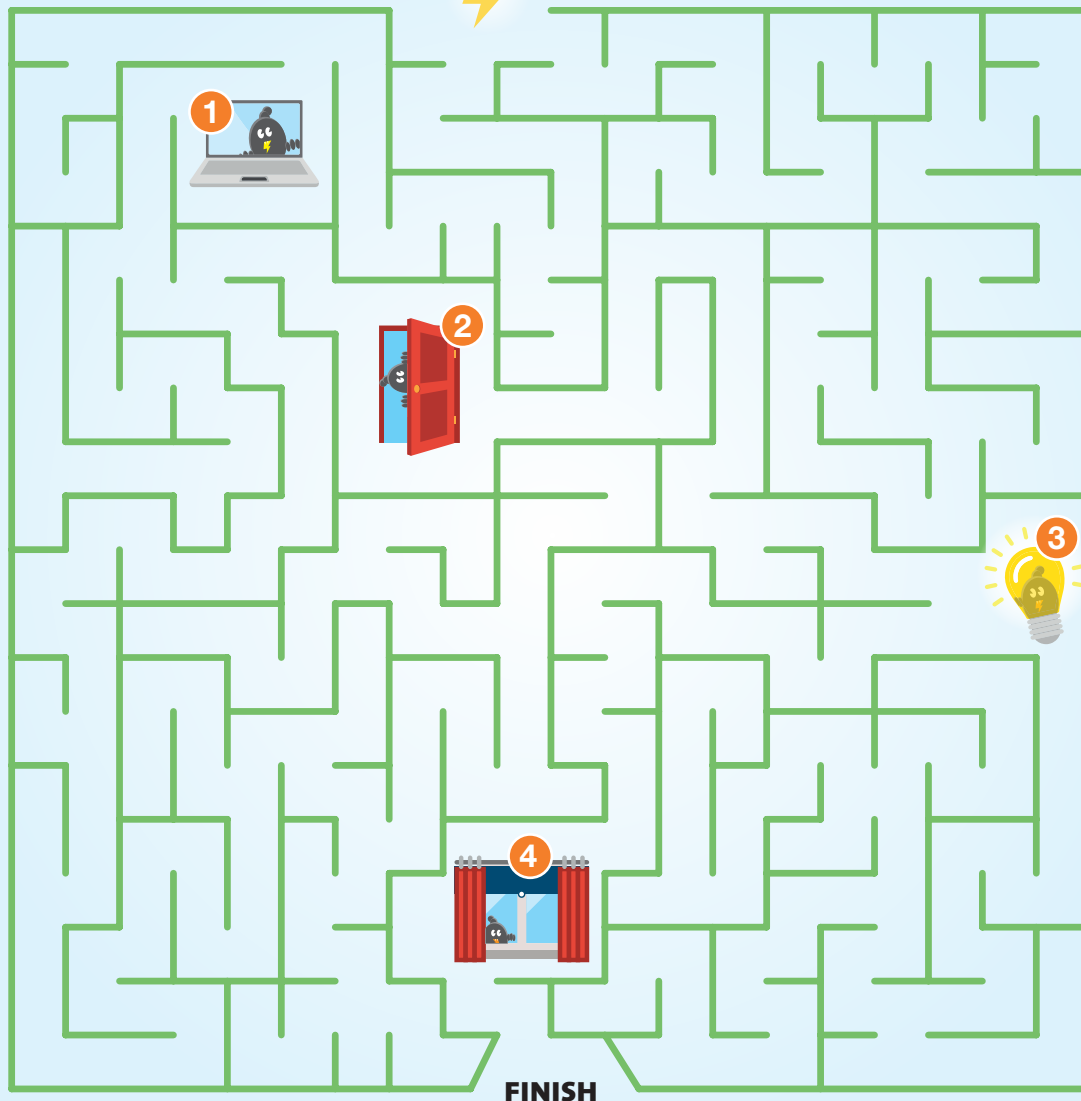
# STOP the Energy Phantoms!



Lumi needs your help. Make your way to each location in the maze to find and stop wasted energy.

- 1 Turn off and unplug** your computer or tablet when you are done using it.
- 2 Shut the door!** If you are running the air conditioner or the heat, keep the door closed to keep the warm or cool air inside the house.
- 3 Switch lights off** when you leave a room.
- 4 Keep your curtains closed** on hot days to block the heat from the sun. When it's cold, keep them open to let more warmth in.

**START HERE** 



**Use natural resources!**  
Sunlight instead of lights, wind instead of air conditioning, and shade from trees to block the heat.



# Set a shining example!

How many times per day do you turn the lights on and off?

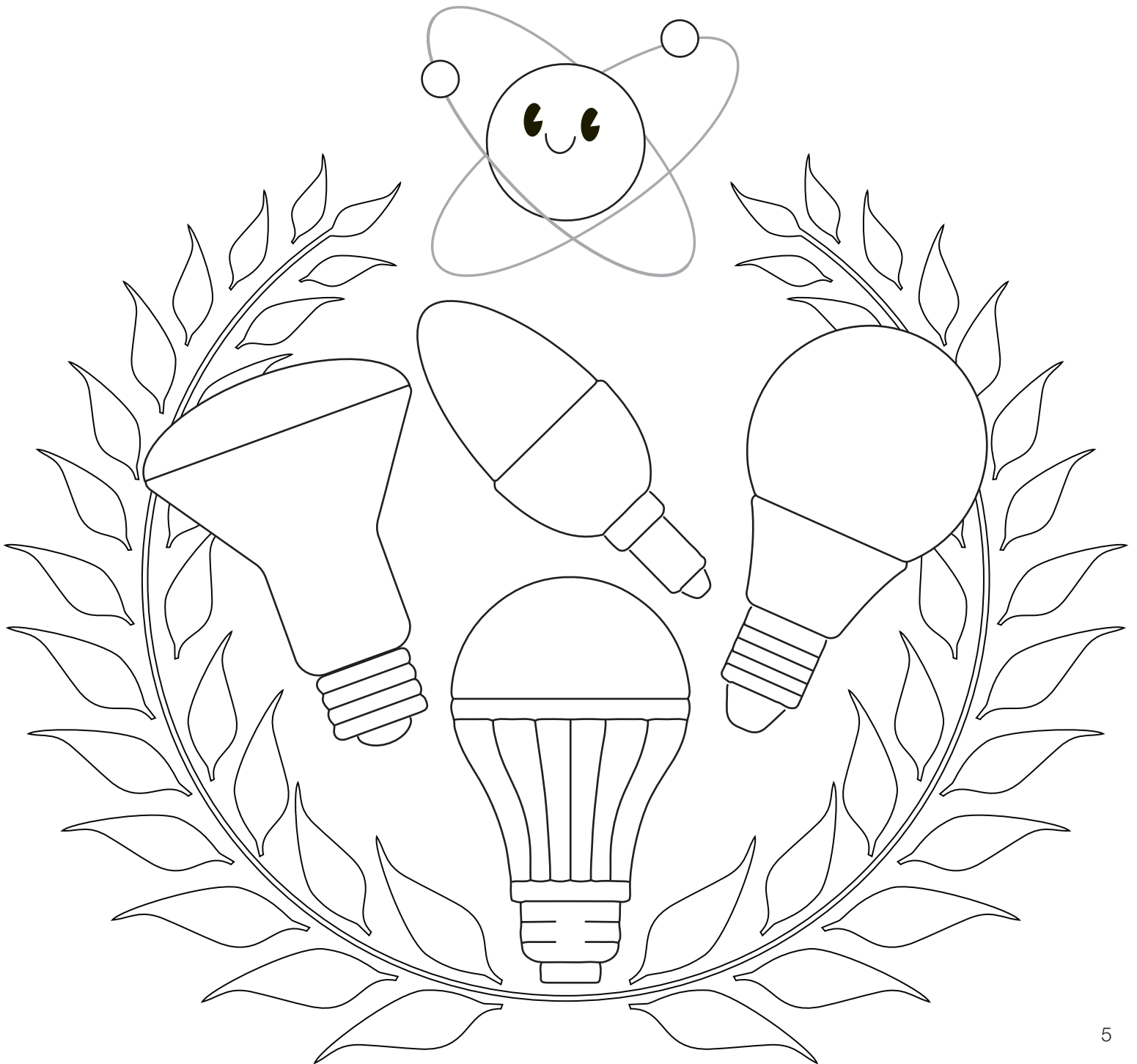
Lighting is one of the biggest energy-saving steps kids can take.



**First**, ask your parents if they are using energy-saving light bulbs. They last longer and cost less to use.

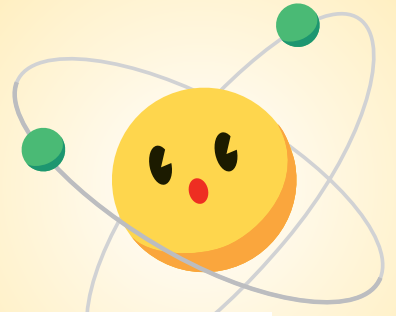


**Second**, turn off the lights! If you leave a room, make sure the lights are off. This is one of the easiest, but best ways you can help out!

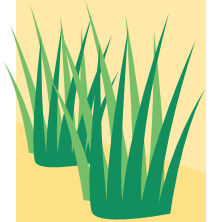
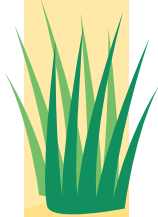


# The search is on!

Oh no! Lumi has lost all the words we learned about saving energy! Can you help find them again?



N H E B B F Z W S G B J N E N  
U D I R G U L P D W B J Z U A  
M Z N R A E G R A H C C M C D  
S L E U F L I S S O F G E V E  
E E K R C M O T N A H P G F M  
N L I M U L P S L T V C F Y A  
I D I H M T E G O T K I G T N  
L D O C L R A A U Z C R N H D  
R M N T V S K R R I E T B G M  
E N V I R O N M E N T C Z I S  
W V N W W O T N E P M E F L M  
O G S S F V C L T V M L F C A  
P P E F R Y L E W A T E R R R  
V N V T H E R M O S T A T D T  
A Q W A I Q A D K J E Z N O K



- |  |                                      |                                     |                                      |                                       |
|--|--------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|
| <input checked="" type="checkbox"/> Lumi | <input type="checkbox"/> Environment | <input type="checkbox"/> Light      | <input type="checkbox"/> Wind        | <input type="checkbox"/> Temperature  |
| <input type="checkbox"/> Energy          | <input type="checkbox"/> Green       | <input type="checkbox"/> Efficiency | <input type="checkbox"/> Solar       | <input type="checkbox"/> Home         |
| <input type="checkbox"/> Savings         | <input type="checkbox"/> Power       | <input type="checkbox"/> Demand     | <input type="checkbox"/> Power Lines | <input type="checkbox"/> Water        |
| <input type="checkbox"/> Electric        | <input type="checkbox"/> BGE         | <input type="checkbox"/> Turn Off   | <input type="checkbox"/> Charge      | <input type="checkbox"/> Thermostat   |
| <input type="checkbox"/> Conserving      | <input type="checkbox"/> Smart       | <input type="checkbox"/> Peak       | <input type="checkbox"/> Grid        | <input type="checkbox"/> Fossil Fuels |
| <input type="checkbox"/> Eco             | <input type="checkbox"/> Plug        | <input type="checkbox"/> Phantom    | <input type="checkbox"/> Switch      | <input type="checkbox"/> Nuclear      |

# We use energy every day!

Our beautiful world has all kinds of resources that create energy. Baltimore Gas and Electric (BGE) transforms these resources into gas and electric energy to power our homes and our lives.

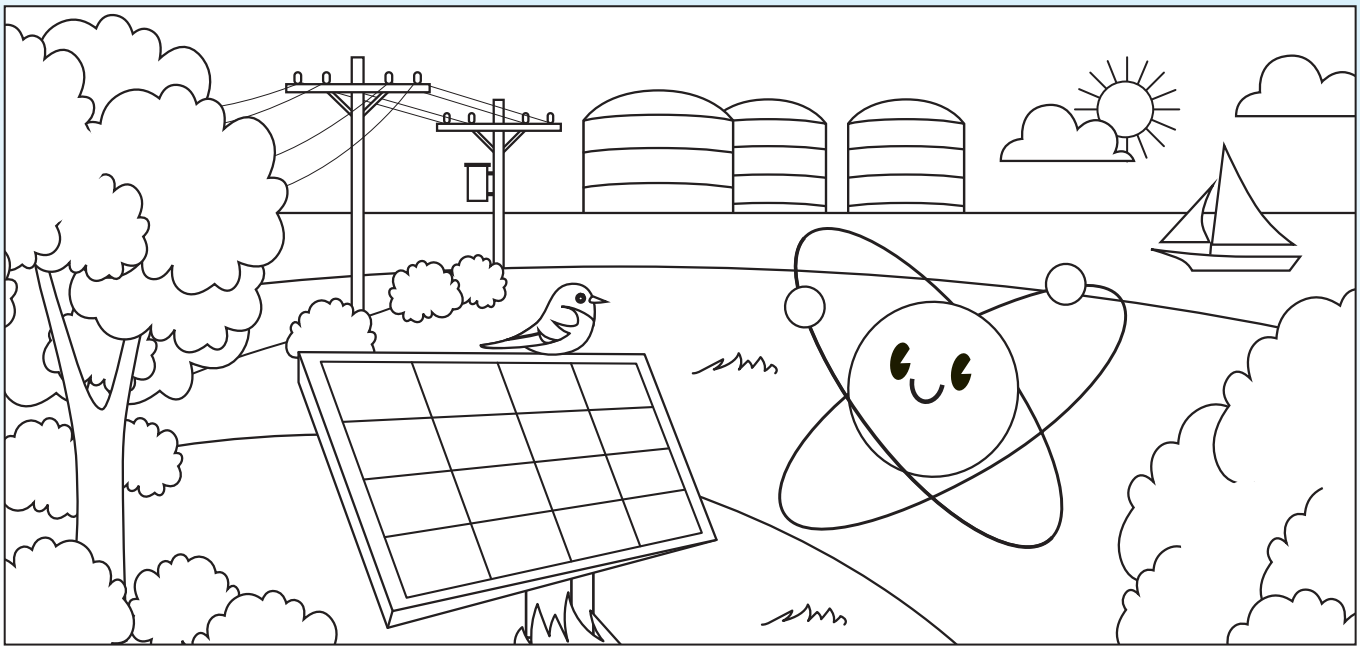


BGE makes energy from fossil fuels, nuclear power, and natural gas.

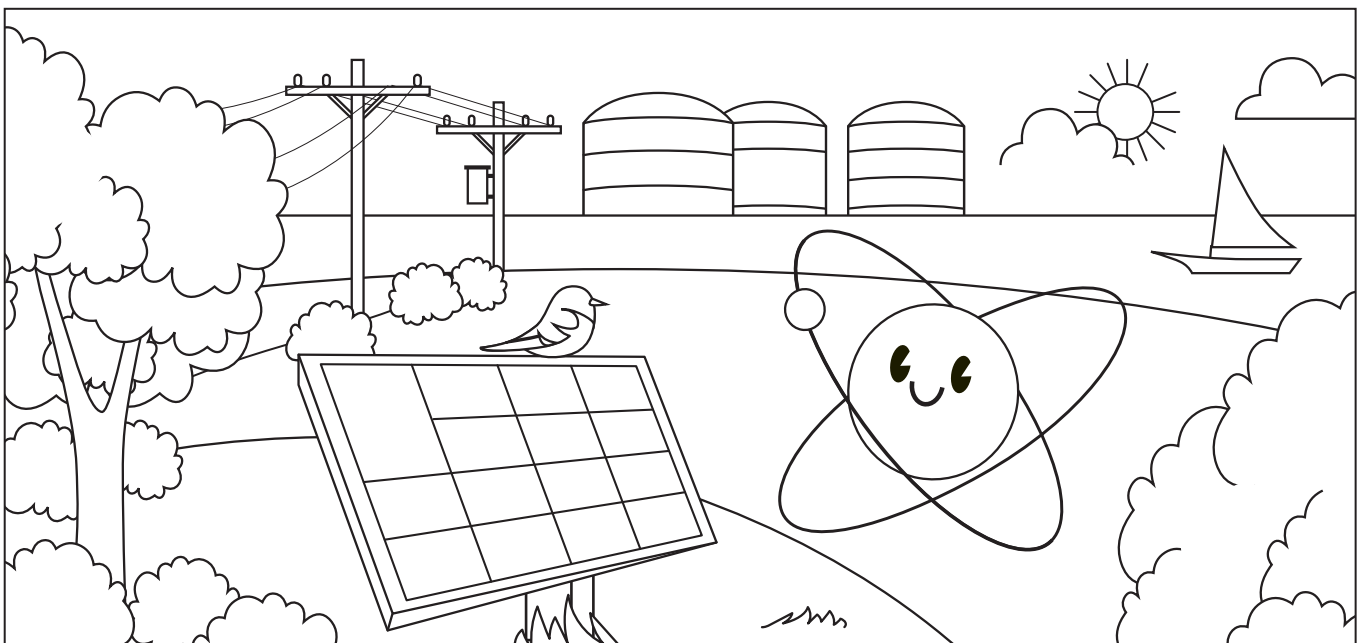
These are called **non-renewable resources** which means that there is a limited amount. This is one very important reason to save energy.



You can also create energy from the sun and water. These are called **renewable resources** which means an energy source that never runs out.

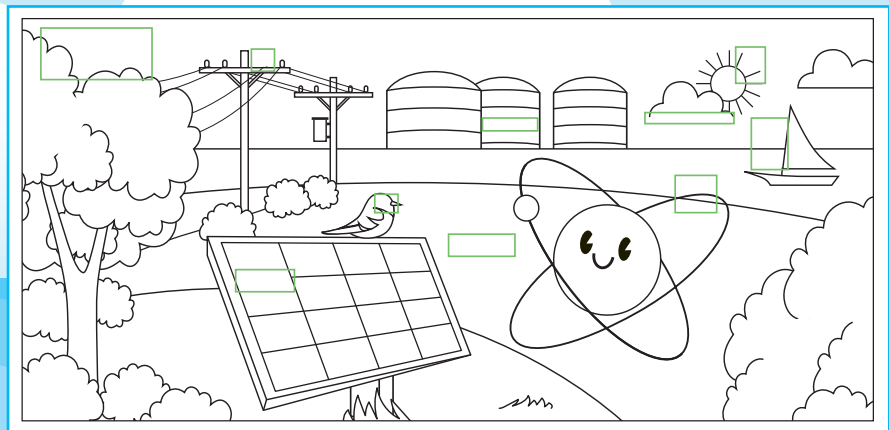
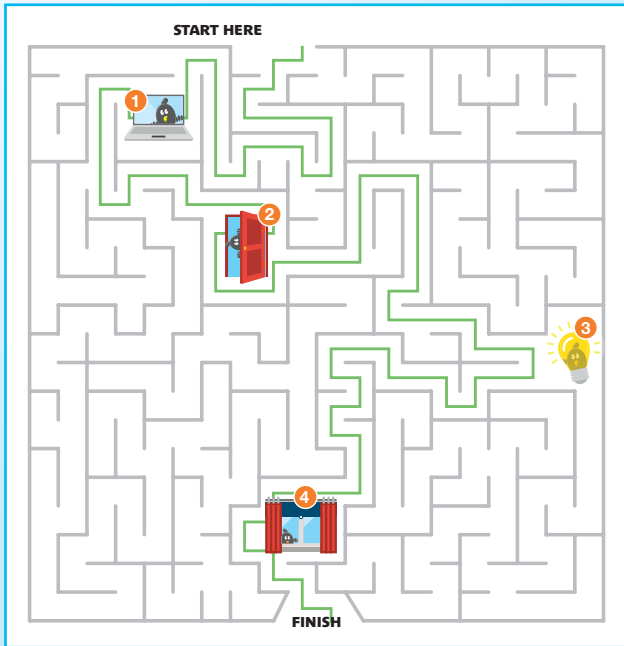
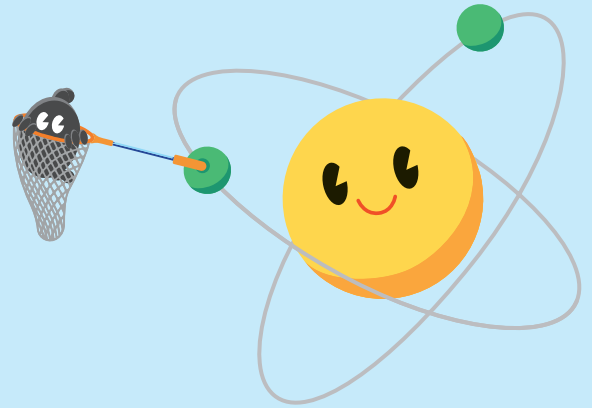


Now look closely: There are 10 tiny details missing in the picture below. Can you find them?



# YOU DID IT!

Thank you for helping me find all these ways to save energy!



EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to [BGESmartEnergy.com](http://BGESmartEnergy.com).



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