

# ENERGY EFFICIENCY DAY



WHY IS IT IMPORTANT TO SAVE OR CONSERVE ENERGY?

# Essential Questions



- How can people reduce their use of energy?
- How does Con Edison support Energy Efficiency Day?

# Objectives



- I will participate in a discussion about Energy Efficiency Day.
- I will learn and share facts about energy efficiency.
- I can state facts about renewable energy sources.
- I will identify ways Con Edison supports Energy Efficiency Day.

# Vocabulary



**Energy:** Energy is the ability to do work. Energy makes things move. It makes machines go. Energy also makes living things grow.



**Efficiency:** producing something without wasting time, effort, material, energy or money.



**Environmental Impact:** changes in the environment, resulting directly from an activity, that can have adverse effects on the air, land, water, fish, and wildlife or the inhabitants of the ecosystem.



**Thermostat:** a device that switches a system or motor on or off according to the temperature.



What do you wonder?

# What is Energy?

On a post-it draw or write an example of what is energy or what uses energy and how.

Energy is the ability to do work. Energy makes things move. It makes machines go.  
Energy also makes living things grow.

Let's dive into Energy Efficiency Day!



# Energy Efficiency Day



**What is it?** This day encourages the efficient use of energy as a crucial way to combat climate change. It is a collaborative effort of dozens of energy efficiency advocacy groups around the United States.

**When is it?** In the U.S., Energy Efficiency Day is celebrated on the first Wednesday of October.

The first Energy Efficiency Day took place on Oct. 5, 2016.



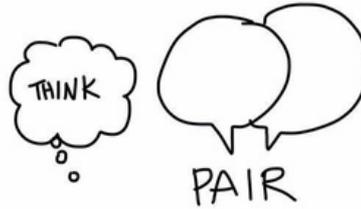
# Think Pair Share

What are ways you think  
you can use energy  
efficiently on Energy  
Efficiency Day ?



With your partner:

- Think about the topic.
- Pick a question.
- Share your thoughts.



What I **k**now?

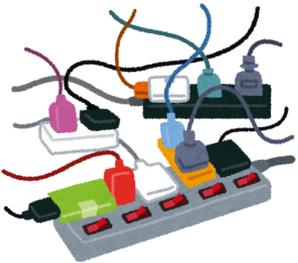
What I **w**onder?

What I **l**earned?

# Impacts of Energy Use



**Rising Energy Demands:** Increasingly hot summers heighten the demand for air conditioning, thereby increasing overall energy use.



Draw or write a way a lot of energy is used around you.



# Why is Energy Efficiency Important?



**Environmental Impact:** Using energy more efficiently reduces emissions that contribute to climate change and lessens our ecological footprint.

**Health Benefits:** Reduced energy consumption leads to cleaner air, helping to decrease respiratory problems like asthma and lowering healthcare costs.

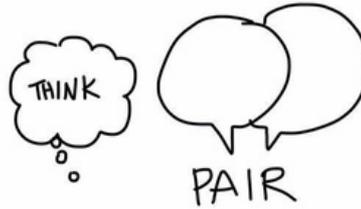
# Think Pair Share

What is energy and how do we save it?



With your partner:

- Think about the topic.
- Pick a question.
- Share your thoughts.



What I **k**now?

What I **w**onder?

What I **l**earned?

# How Does Con Edison Participate?



**Home Energy Breakdown Calculator:** Con Edison's Home Energy Breakdown Calculator, encourages families to explore home energy use and identify additional savings.

## Home Energy Breakdown

Plug in some quick details about your home to see where your energy goes.

CALCULATE



# Vocabulary



**Wattage (W):** The amount of power an electrical device uses.



**Kilowatt (kW):** A unit of power equal to 1000 watts. It measures the rate at which energy is used or produced.

**kWh**

**Kilowatt-hour (kWh):** A unit of energy equal to using 1000 watts for 1 hour.



**Energy (kWh):** The total amount of power used over time.

**Formula: Energy (kWh) = (Wattage (W) × Hours) / 1000**

# Let's Calculate Dany & Ricky's Energy Use



Hint: ( 200 watts × 3 hours ) / 1000 = kWh/day



My gaming system uses about 200 Watts. I use it with my friends for about 3 hours a day. How many kWh/day is that?

# Let's Calculate Dany & Ricky's Energy Use



Hint: ( 10 bulbs × 60 watts × 5 hours ) / 1000 = kWh/day



There are 10 light bulbs in my house.  
They are each 60 watts. My family  
uses them for about 5 hours a day.  
How many kWh/day is that?

# How Can You Participate?



**Turning Off Lights:** Make sure lights are off in unoccupied rooms.

**Clean Ducts and Vents:** You can remind parents when it's time to check and clean air ducts and vents.

**Swapping Out Shades Seasonally:** Changing window shades with the seasons, saves on heating and cooling of the home.

**Consider a Cold Wash:** Remind your parents that using cold water in washing machines helps save energy.

**Unplug For a Little:** Unplug from your digital devices like your TV, iPad, or video games for a little bit each day. Instead pick up a book and read. Ask your parents to play a board game or have fun outside.



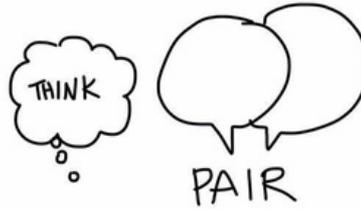
# Think Pair Share

How can you practice energy efficiency?



With your partner:

- Think about the topic.
- Pick a question.
- Share your thoughts.



What I **k**now?

What I **w**onder?

What I **l**earned?

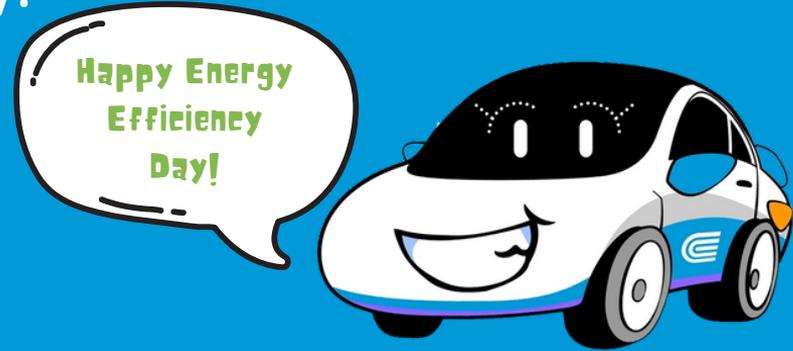
# What is Energy Efficiency Day?

Energy Efficiency Day is a special day for everyone to celebrate the planet and learn how to take care of it.

## How can you help with Energy Efficiency Day?

Learn about the importance of energy conservation. Share and empower your friends and family to participate.

Based off of what you've learned about renewable energy, how can conserving energy help your family and friends? How can you use Energy Efficiency Day to share what you know about conserving energy and its benefits?

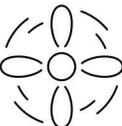
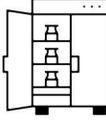
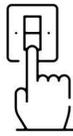
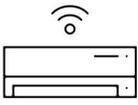
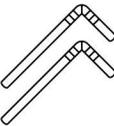
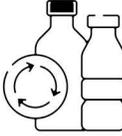
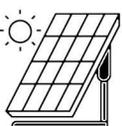
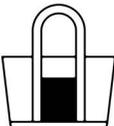
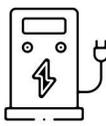
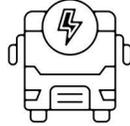


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# ENERGY EFFICIENCY BINGO

SEE HOW MANY ITEMS ON THE BINGO CARD YOU CAN SPOT OR DO. FOR ANY TO-DO ITEMS, MAKE SURE YOU ASK AN ADULT FOR HELP. ONCE THE SQUARE IS COMPLETE, COLOR THE IMAGE IN. THE FIRST PERSON TO GET BINGO (5-IN-A-ROW) IS THE WINNER!

B	i	N	G	O
 SPOT A WIND TURBINE	 CLEAN YOUR VENTS AND DUCTS	 SPOT AN ELECTRIC CAR	 DEFROST YOUR FREEZER TO MAKE IT MORE EFFICIENT	 SUPPORT A LOCAL BUSINESS
 USE A REUSABLE WATER BOTTLE	 SAFELY UNPLUG APPLIANCES THAT AREN'T IN USE	 SPOT A SMART THERMOSTAT	 TURN OFF LIGHTS IN AN EMPTY ROOM	 READ A BOOK INSTEAD OF WATCHING TV
 SPOT A RECYCLING BIN	 CLEAN YOUR AIR CONDITIONING FILTERS	<b>FREE</b>	 SHUT DOWN COMPUTERS AND TABLETS AT THE END OF THE DAY	 RIDE A BIKE OR WALK TO SCHOOL
 DO A COLD LAUNDRY WASH	 PLANT A TREE	 REPLACE A SINGLE USE ITEM WITH A REUSABLE ONE	 RECYCLE A GLASS OR PLASTIC BOTTLE	 ADJUST YOUR THERMOSTAT FOR NIGHTS AND WHEN YOU AREN'T HOME
 SPOT SOLAR PANELS	 ASK A PARENT TO HELP REPLACE REGULAR LIGHTBULBS WITH LED BULBS	 USE A REUSABLE SHOPPING TOTE	 SPOT AN ELECTRIC CAR CHARGING STATION	 SPOT A ZERO EMISSIONS ELECTRIC BUS

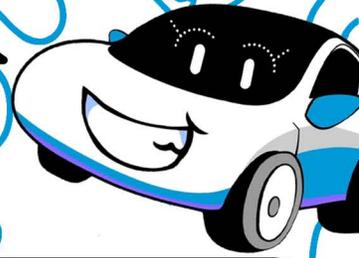
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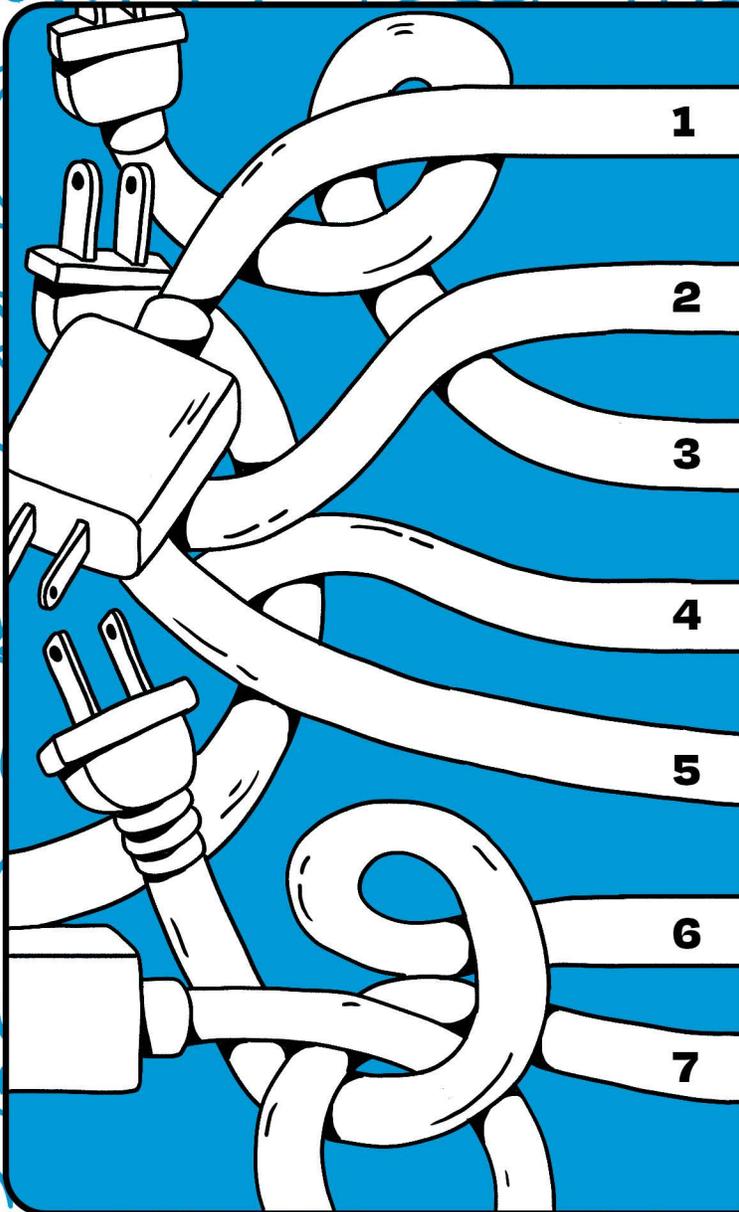
Name: \_\_\_\_\_

Date: \_\_\_\_\_

## TURN OFF THE LIGHTS!

HOW MANY LIGHTS/CHARGERS THAT WERE NOT BEING USED DID YOU UNPLUG SAFELY. TALLY AND DESCRIBE THEM BELOW.



	1	
	2	
	3	
	4	
	5	
	6	
	7	

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# Energy Efficiency Day

- 1. Efficiency means to produce something without wasting, \_\_\_\_\_.**
  - a. effort
  - b. time
  - c. energy
  - d. all of the above
  
- 2. Energy Efficiency Day is a day celebrated on the first Wednesday of October. This day encourages the efficient use of energy as a crucial way to combat climate change.**  
 True  
 False
  
- 3. You can save energy by \_\_\_\_\_.**
  - a. buying and installing standard light bulbs.
  - b. buying and installing standard appliances.
  - c. keeping windows open while running the air conditioner.
  - d. none of the above.
  
- 4. Kids, adults and families around the world can participate by following energy saving tips like unplugging electronics and turning off lights when not in use.**  
 True  
 False
  
- 5. Increasingly hot summers heighten the demand for air conditioners, thereby increasing \_\_\_\_\_.**
  - a. wind mills manufacturing.
  - b. overall energy use.
  - c. gas utility bills.
  - d. all of the above
  
- 6. Using energy more efficiently increases emissions that contribute to climate change.**  
 True  
 False

Name: \_\_\_\_\_ Date: \_\_\_\_\_

7. **Reduced \_\_\_\_\_ consumption leads to cleaner \_\_\_\_\_ helping to \_\_\_\_\_ respiratory problems like asthma.**

8. **To save energy, families can \_\_\_\_\_.**

- a. keep lights on in all rooms throughout the house.
- b. switch out shades with the seasons.
- c. use hot water when using laundry.
- d. keep chargers plugged in even when not in use

9. **Smart thermostats are a type of energy efficient device.**

- True
- False

10. **Families can help support Energy Efficiency Day by \_\_\_\_\_.**

- a. teaching kids the importance of wasting energy.
- b. encouraging daily habits such as closing doors quickly to keep hot or cold air inside.
- c. purchasing standard appliances.
- d. watching tv instead of reading books.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

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