

CenterPoint Energy School Education Program

# FAMILY GUIDE



 **CenterPoint**<sup>®</sup>  
**Energy**

# Dear family,

Welcome to Think! Energy.

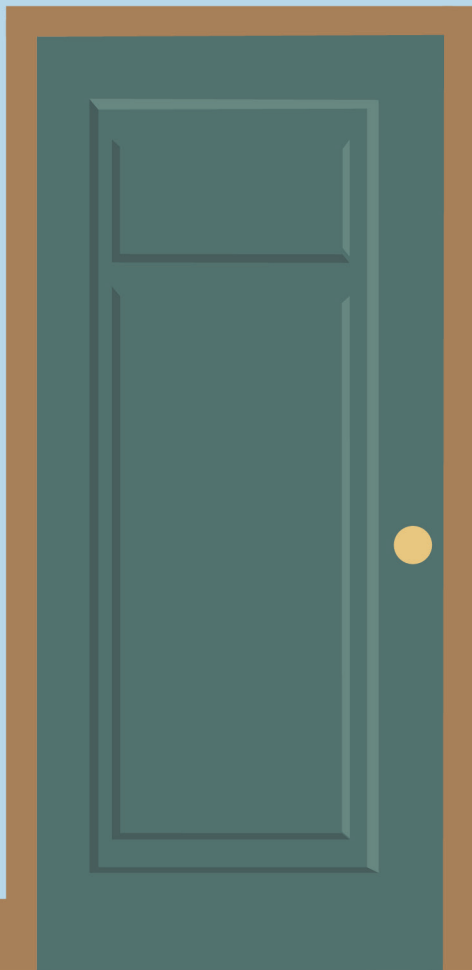
Energy is a big part of our everyday lives. Have you ever thought about where it comes from or how it gets to where you need it? You are about to find out!

You will receive a *Take Action Kit* containing energy-efficient products for your home. As you install these items, share with your family what you have learned about energy at school. Then use this guide to discover other ways to conserve energy and water together.

Thank you for making a difference!

**Earn your scented highlighter by completing the *Home Energy Worksheet (HEW)* in one of two ways:**

- Visit [thinkenergy.org/CenterPointEnergy](http://thinkenergy.org/CenterPointEnergy) to fill out an online worksheet. You will need to enter the teacher ID which can be found using the teacher lookup tool on the program website.
- Fill out the paper worksheet and return it to your teacher.



# Activity 1

## Your Home's Electricity Use

Most families in the U.S. use about **54%** of their electricity for lighting and to power appliances and electronics, **32%** to heat and cool their homes and **14%** of their energy to heat water.

Color in the pie chart with three colors of your choice. The pie slices should equal the percentages above.



- Lighting, Appliances and Electronics
- Heating and Cooling
- Heating Water

(Source: [eia.gov/todayinenergy/detail.php?id=36412](http://eia.gov/todayinenergy/detail.php?id=36412), accessed March 2023)

Energy is the ability to do work. We need energy to heat and cool the air and water in our homes. We also need energy to power appliances and our electronic devices. Did you know that our energy comes from **renewable** and **nonrenewable** resources?

Renewable	Nonrenewable
sun	oil
wind	coal
water	natural gas
geothermal	uranium
biomass	

When we are **efficient** with energy, we use less of it to do the same amount of work. To be more energy efficient, Think! about how energy is used, Talk! to your family about ways to use energy wisely and **Take Action!** by installing the items in your *Take Action Kit*.\* The *Installation Instructions* in your kit or installation videos at [thinkenergy.org/CenterPointEnergy](http://thinkenergy.org/CenterPointEnergy) can help.



Let's get started. Take a tour of this energy-efficient home to see how efficiently you are living.

\*Not every energy-efficient item in this booklet will be in your *Take Action Kit*.

# Kitchen

## Kitchen Aerator

Install your new kitchen aerator. For help, see the installation instructions in your kit.

Use the flow test bag from your kit to measure how fast water comes out of your old and new faucet. How much water are you saving with your new aerator?

## Fans

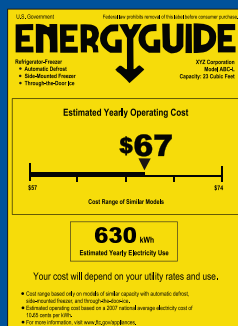
Fans can save a lot of energy. If you use air-conditioning, a ceiling fan will allow you to raise the thermostat and still feel cool.

## Refrigerator

Recycle the old, inefficient model rather than using it as a spare.

Decide what you want before you open the door.

Yellow EnergyGuide labels show the efficiency of an appliance and the cost to run it.



## Cooking

For cooking or reheating small portions, use the microwave or toaster oven.

Always match the pot to the size of the burner and use lids to shorten the cooking time.

Keep the oven door closed as much as possible when baking.

## Dishwasher

Only run the dishwasher if it is full.

Turn off the heat-dry switch and let the dishes air-dry.

Choose an ENERGY STAR® model when you are buying a new dishwasher.

How many students does it take to change an inefficient light bulb?

Answer: A Watt!

Ask an adult to seal small holes around windows and doors with caulk, foam spray or weather-stripping.

## Activity 2

### Break the energy efficiency code!


**KEY**

	a		b
	c		d
	e		f
	g		h
	i		j
	k		l
	m		n
	o		p
	q		r
	s		t
	u		v
	w		x
	y		z

# Family Room

Purchase LEDs. They use up to 90% less energy and last up to 25 times longer than incandescent lighting.

What do turning off the lights and a baseball team have in common?

Answer: They both need a "switch hitter."

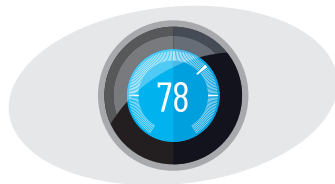
## Fireplace

Always keep the fireplace flue closed when not in use. Glass fireplace doors also keep the cold air out.

## Thermostat

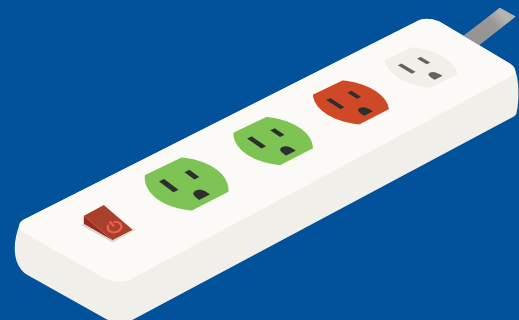
Install a programmable or smart thermostat to regulate the temperature of your home according to your schedule. This low-cost item is easy to install and will save both energy and money.

Set your thermostat at 68 F in the winter and as high as is comfortable in the summer.



## Advanced Power Strips

There are several types of advanced power strips. They all have the same job of shutting off power supply to items that are not in use. The television can be plugged into the control outlet of this power strip. Television accessories turn off when the television is off.



# Bedroom

Use efficient LEDs.

Turn off the lights when you leave the room.

Unplug chargers when they are done with their job. They continue to draw electricity even when a battery is fully charged.

## Windows

Keep windows closed when the furnace or air conditioner is on.

Close drapes and blinds when you want to keep out sunlight and heat.

Use an energy-efficient night light.

### Activity 3

Let's go on an energy scavenger hunt! Search for each item in your home.

I FOUND IT HERE.



LED



Ceiling Fan



Advanced Power Strip



Caulk, Foam Spray or Weather-stripping



Door Sweep Under Exterior Doors

Why did the silly gardener plant a light bulb?

Answer: The gardener wanted to grow a power plant.

# Bathroom

Turn off the water when brushing your teeth.

Always repair leaky faucets.

Save water by installing WaterSense® toilets.

For more information visit [epa.gov/watersense](http://epa.gov/watersense).

## Showerhead

Use the flow test bag from your *Take Action Kit* to measure how quickly water comes out of your existing showerhead.

Install your new, efficient showerhead, using the plumber's tape in your kit. For help, visit [thinkenergy.org/CenterPointEnergy](http://thinkenergy.org/CenterPointEnergy) to watch an installation video or see the installation instructions in your kit.

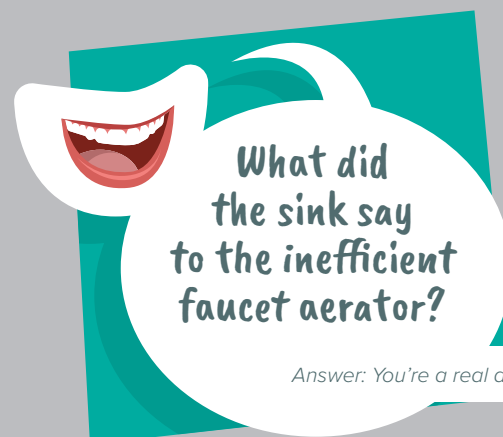
Use the flow test bag again to see how much water you can save every minute the shower is on.

## Shower Timer

Use a shower timer to remind your family to take the 5 minute shower challenge.

## Bathroom Aerator

Install the energy- and water-efficient bathroom aerators to cut your water use by 30% or more.






# Laundry Room

## Washer and Dryer

Wash with cold water.

Always wash a full load.

Air-dry laundry when possible.



What renewable energy source do students use?

*Answer: Brain power*



### Activity 4

1									
2									
3	I								N
4	F								
5	T								
6									
7									
8	R								R
9	A								R
10									

Find the mystery words by filling in the puzzle.



# Utility Room

Since natural gas is odorless, a smell called mercaptan is added as a safety measure. Be aware of this rotten egg smell if you have a gas stove, water heater or furnace.

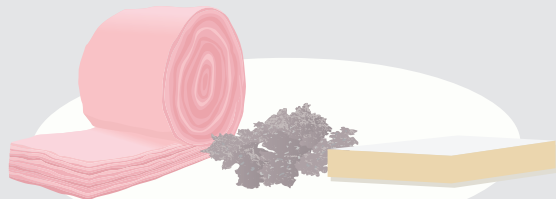
## Water Heater

Typically, the water heater should be set to 120 F. Try another fun science experiment. Use a thermometer to measure the temperature of hot water coming out of a faucet. Is the water heater set correctly? If not, have an adult adjust it.

Add pipe wrap to your conventional water heater.

## Insulation

Your house will be more comfortable year-round with insulation in its attic, exterior walls and basement to stop the transfer of heat.



Fiberglass Roll

Loose Fill  
Insulation

Rigid Foam  
Insulation

## Heating and Cooling

Install a furnace filter whistle. It will remind you when the filter needs to be changed. A clean furnace filter saves energy by helping your furnace to operate more efficiently.

Clean and service your heating and air-conditioning units once a year.

If your equipment is older than 10 years, consider replacing it with an ENERGY STAR® qualified model.

Living in an apartment? Ask your landlord if the furnace or boiler is regularly serviced.

## Take the next step.

Visit [CenterPointEnergy.com/SmartSavings](http://CenterPointEnergy.com/SmartSavings) to take advantage of all the programs CenterPoint Energy has to offer for energy efficiency.

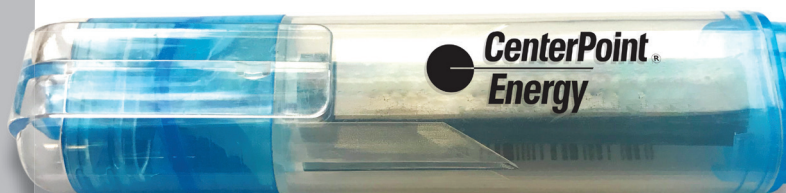
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It is easy. Scan this QR code.



\*If you cannot use any item from the kit, please give the device to a neighbor, friend or relative who lives nearby. The HEW should reflect use of all items from the kit, even if used in someone else's home.





Think!



Talk!



Take Action!



National  
Energy  
Foundation

Having trouble with kit items?  
Call **1.800.939.1325**  
[thinkenergy.org/CenterPointEnergy](http://thinkenergy.org/CenterPointEnergy)

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