HOME ELECTRICAL SAFETY INSPECTION



Always remember to use caution when you're near electricity! Ask an adult to help you complete the inspection below for your home. If you find any hazards, check "Needs Work," and ask an adult to fix them.

	True	Needs Work
1. Electric outlets are not overloaded.		
2. Electric cords do not run under rugs or furniture legs.		
3. No electric cords are worn or frayed.		
4. Electric appliances are kept away from water.		
5. There is a fire extinguisher in the house.		
6. Electric heaters are far away from flammable objects.		
7. Power tools are stored in clean dry areas.		
8. All smoke detectors are properly working.		
9. There are safety plug covers on outlets that are not in use.		
10. There are no trees near the house that interfere with power lines.		



ELECTRICAL SAFETY QUIZ



Electricity is great! We use it to light our homes, watch TV with our families and enjoy many other activities. But electricity can be dangerous if we aren't careful when using it. Test your electrical safety knowledge by answering the questions below.

- 1) It is safe to run extension cords under carpet or rugs in your home.
 - A. False
 - B. True
- 2) How often should smoke alarms in your home be tested?
 - A. Once a year
 - B. Once a month
 - C. Once every three months
- 3) How far should items be kept away from space heaters?
 - A. At least one foot
 - B. At least five feet
 - C. At least three feet
- 4) Overloaded outlets can overheat and cause a fire.
 - A. True
 - B. False
- 5) When using an electrical appliance or playing with an electrical toy outside, what is the minimum distance you should keep between yourself and any wet surface or swimming pool?
 - A. Ten feet
 - B. Five feet
 - C. Three feet



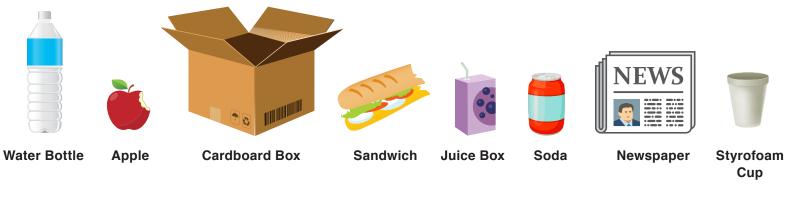
How many did you get right? Check the answer key below!

SORTING THINGS OUT



Recycling is important for the future of our planet! Can you sort the items below into the correct bin? Write the name of the item in the correct category.

RECYCLE GARBAGE



Answer Key: RECYCLE: Water Bottle, Cardboard Box, Juice Box, Soda Can, Newspaper GARBAGE: Apple, Sandwich, Styrofoam Cup



Energy Sources Activity

Renewable Sources

Did you know Americans use electricity that is generated from different fuel sources? Some fuel sources are renewable, meaning they harness natural energy from the Earth's resources, and some are non-renewable, meaning they use fossil fuels.

Do you know which energy sources are renewable and non-renewable? Use safety scissors to cut out the images below and place them in the correct row. Use the answer key to check your work.

Non-Renewabl	e Sources		
uclear, Coal, Oil	vable Sources: Natural Gas, Ni	Vind, Biomass, Solar Non-renev	newable Sources: Hydro, V
Coal	Wind	Solar	Oil

STORM SAFETY CROSSWORD PUZZLE

Spring has finally arrived with colorful flowers and warmer weather. But the season can also produce severe storms. The Energy Explorers want to remind everyone to stay safe when severe weather hits. Complete the crossword puzzle below and share these tips with your family and friends.



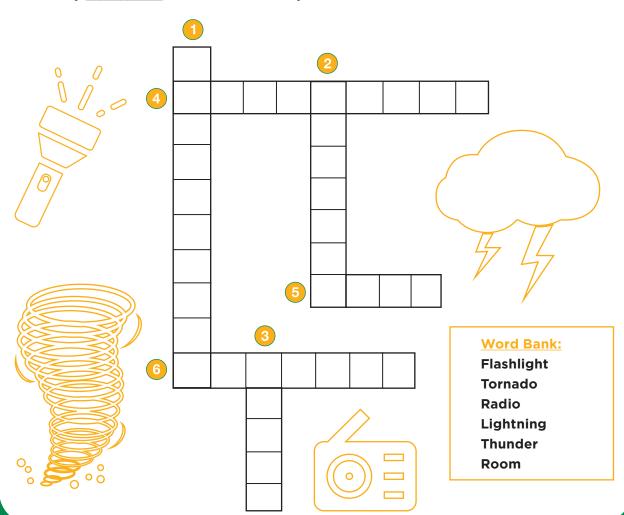
D	O	W	N

 Keep a handy in case of a power outag 	ge.
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- 2. If you hear _____ go inside. If you can hear it, you are close enough to be in danger from lightning.
- 3. Have a battery-powered weather _____ nearby so you can keep track of the severe weather.

ACROSS

- 4. Watch for signs of a thunderstorm, including dark skies, flashes of _____ or heavy winds.
- 5. If a tornado is heading your way, pick a safe _____ in your home where family can gather. The safest places would be a basement, storm cellar or interior room.
- 6. Practice a family _____ drill at least once a year.



CO-OP MONTH WORD SEARCH

Did you know October is National Co-op Month? Co-ops are different types of businesses because they are not-for-profit and are owned by the members they serve — including you!

Use the word bank to find the words associated with co-ops in the puzzle below.



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

Word Bank

PRINCIPLES
COOP MONTH
PARTICIPATION
MEMBERS
DEMOCRACY

COOPERATION
NOT-FOR-PROFIT
COOPERATIVE
EDUCATION
COMMUNITY



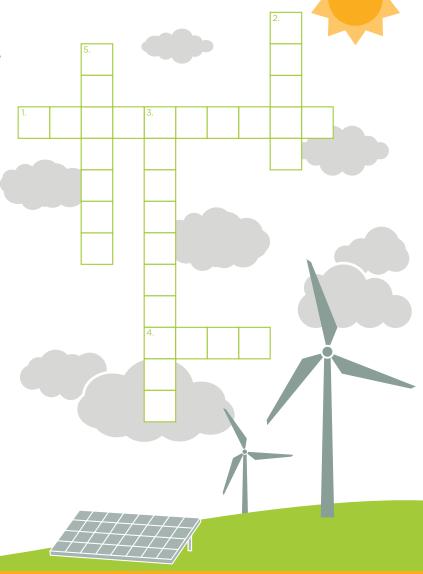


RENEWABLE ENERGY SOURCES CROSSWORD



Did you know the electricity you use in your home is generated using a variety of fuel sources? Some energy sources are nonrenewable (like coal and natural gas) and some are renewable (like solar and wind energy). Learn about renewable energy sources and complete the puzzle below.

- 1. ACROSS: ____ energy uses heat from the earth. People can use the heat to warm buildings or to generate electricity.
- 2. DOWN: _____ energy is produced through panels that convert sunlight into electricity.
- 3. DOWN: ______ is energy produced from moving water. The power plant is typically located on or near a water source.
- 4. ACROSS: _____ energy uses tall turbines with blades to collect kinetic energy.
- 5. DOWN: ______ is organic material that comes from plants and animals; it contains stored energy from the sun and when burned, uses chemical energy that is released as heat.



ENERGY VAMPIRE WORD SEARCH

Are energy vampires lurking in your home? Energy vampires are appliances and electronics that consume energy even when they aren't being used.

Circle all potential energy vampires in the word search below. Tip: Use the word bank as a guide.



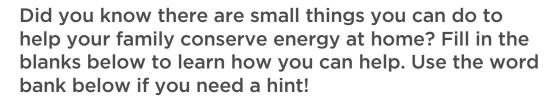


Word Bank

GAME CONSOLE COFFEE MAKER PHONE CHARGER CABLE BOX MICROWAVE DVD PLAYER TELEVISION

To save energy, unplug these items when they are not in use.

ENERGY CONSERVATION TIPS FOR KIDS!





	Turn the of month just by taking		ng your teeth. You can sav	e several gallons a
2	•	a room, remember to which save the most		Ask your parents if
3	With the help of you	r parents,	glass, plastic, paper and a	aluminum items.
4	When the heat or air	conditioning is runnir	ng, always keep	to the outside closed.
5	Take short	instead of baths to	conserve water use.	

Word Bank

Showers
Doors
Water
Recycle
Lights





ELECTRIFYING WORD SEARCH!

Can you find the words associated with electricity in the puzzle below?
Use the word bank if you need a hint!





Word Bank

ELECTRICITY

CIRCUIT

WATTS

CURRENT

WIRES

POWER

SWITCH

VOLTAGE

BULB

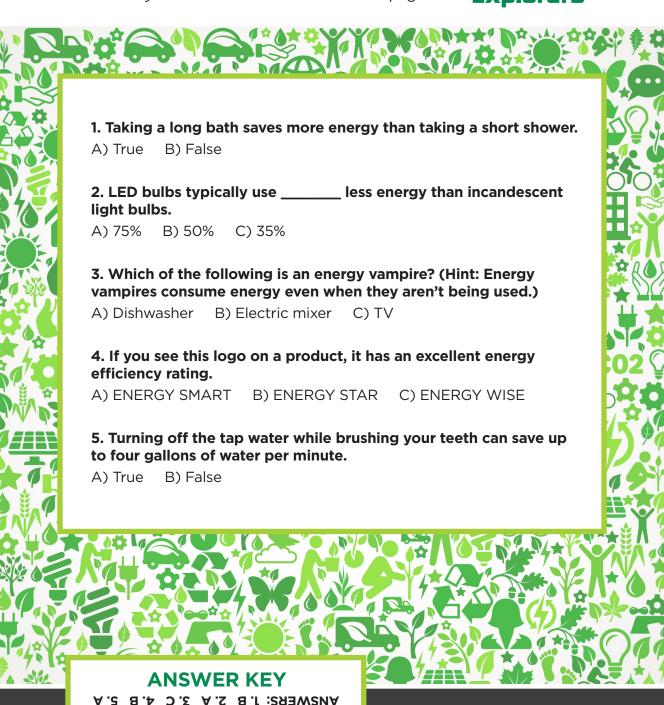
CHARGE



ENERGY EFFICIENCY QUIZ

Energy Explorers

Are you an energy efficiency whiz?
Test your knowledge by taking the quiz below.
Hint: Check your answers at the bottom of the page.



GEARED FOR SAFETY

Electric co-op lineworkers wear special gear to help them stay safe on the job. Can you match the descriptions below to the correct safety equipment? Use the answer key to check your work!



Clothing

- 1. These provide extra protection while lineworkers work with heavy materials that could fall near their feet.
- 2. This material keeps lineworkers safe from electrical hazards.
- 3. This protects lineworkers from head injuries and falling debris.
- 4. These insulated protectors keep lineworkers safe from electrical shock while working on power lines.
- 5. These keep debris away from lineworkers' eyes while on the job.
- 6. This is a handy piece of safety gear that holds tools and other equipment.



4. Insulated Gloves 5. Safety Goggles 6. Equipment Belt Answers: 1. Work Boots 2. Flame-Resistant Clothing 3. Hard Hat





WIND ENERGY WORD SEARCH

Did you know wind can be used to generate electricity?

The wind blows, turning the blades on the wind turbine, which turns the generator inside the turbine - this produces electricity.

Circle the words associated with wind energy in the puzzle below.

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

Word Bank

TURBINE

WIND

ELECTRICITY

BLADES

POWER

WIND FARM

SPIN

RENEWABLE

GENERATOR

ENERGY

Fun Fact

Wind farms are built in flat, open areas where the wind blows at least 14 miles per hour.



ELECTRICAL SAFETY QUIZ

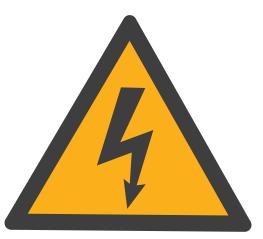
Test your electrical safety knowledge by taking the quiz below!

Use the answer key if you need help.

- 1. Smoke alarms in your home should be tested _____.
 - A. once a week
 - **B.** twice a year
 - C. once a month
- 2. Overloading electrical outlets and power strips can create an electrical fire hazard.
 - A. True
 - **B.** False
- 3. What's the most dangerous place to use electricity?
 - A. Outdoors
 - B. Near other electrical equipment
 - C. Near water
- 4. It's safe to run an electrical cord under a rug or carpet as long as the cord is not damaged.
 - A. True
 - **B.** False
- 5. Which is safest to play near?
 - A. Power lines
 - **B.** Pad-mounted transformers
 - C. Neither A or B both are dangerous







ENERGY TERMS QUIZ

Can you match the definitions below with the correct energy terms? Use the word bank for clues!



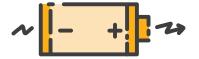
1. These energy sources, like coal, oil and natural gas, were formed from the remains of ancient plants and animals buried underground and are used to generate electricity.





- 2. This is the network of poles and power lines that sends electricity from where it's generated to homes and businesses all over the county.
- **3.** These energy sources include natural energy from the sun, wind and water and are used to generate electricity.





- **4.** This is the flow of electrically charged particles like electrons within a conductor or circuit.
- 5. This is the act of using less energy.



Word Bank

CURRENT

ELECTRIC GRID

RENEWABLE RESOURCES
ENERGY CONSERVATION

FOSSIL FUELS

Answer Key: 1. fossil fuels 2. electric grid 3. renewable resources 4. current 5. energy conservation

CO-OP MONTH CROSSWORD

October is National Co-op Month! Complete the crossword puzzle below to learn about ways co-ops are unique. Need a hint? Use the work bank below.



CO-OPS Tor the community	4	2		3					
WORD BANK:									
LED									
MEMBERS LOCAL									
COMMUNITY									
PRINCIPLES			-						
			5						
CLUES:									
	1. DOWN: Co-ops are organizations and businesses, so they understand the communities they serve.								
2. DOWN: Co-ops don't ha		-							
3. DOWN: All co-ops opera seven cooperati	t of								
4. ACROSS: "Concern for _ cooperative p									
5. ACROSS: Co-ops are	· ·	ers they s	serve.						

ENERGY VAMPIRES ARE LURKING IN YOUR HOME



Save energy in your home by locating energy vampires!

These are the electronics and appliances that consume energy even when they are not being used. *Circle the energy vampires below, and use the key to check your answers.*









FALL SAFETY TIPS FOR KIDS!

Fall is finally here! The leaves are changing, the weather is cooler and the holidays are just around the corner. But Fall also brings a higher risk of home fires and electrical safety hazards.

Read the safety tips below and fill in the blank with the correct term from the word bank.



- Candles and _____ should only be used by adults.
- An adult should always stay in the kitchen when something is ______.
- 3. Smoke alarms should be tested every _____ to ensure they are working. Batteries should be replaced at least once every ____ or right away if they start to "beep."
- **4.** Make sure all _____ are blown out before leaving a room.
- Keep any items that can burn away from the stove, toaster and other cooking



WORD BANK

APPLIANCES COOKING

YEAR MATCHES CANDLES MONTH

ENERGY SAVINGS WORD SEARCH

Did you know there are many ways you can help save energy in your home?





0	Ε	S	P	W	F	W	A	Т	E	R	S	Y	Ε	S
A	L	L	R	S	A	Ε	Т	D	Ε		A	L	S	R
Т	Ε	X	K	Ε	J	Т	0	G	Н	C	Ε	P	X	Ε
L	C	0	0	G	G	Z	Ε	N	X	C	N	M	N	W
B	Т	B	F	M	X	R	R	R	Т	B	X	Q	K	0
G	R	1	S	M	M	R	Α	R	Н	C	L	1	D	Н
X	1	S	Y	K	Y	Ε	0	Н	X	Ε	V	A	F	S
	C	B	X	X		N	Y	B	C	N	A	P	J	1
A	1	G	Y	Z		н	F	Н	X	C	F	Т	Y	Ε
U	Т	U	N	C	W	U	Y	X	Z	0	M	B	Ε	S
U	Y	Z	S	Ε	M	F	P	0	R	V	N	V	Т	R
R	Ε	F	R	1	G	Ε	R	A	Т	0	R	Н	Ε	Q
Е	V	J	M	Q	S	D	M	D	F	V	G	N	Y	L
W	M	Ε	0	F	P	N	Т	K	W	1	Н	X	Q	-1
G	N	1	н	Т	0	L	C	R	L	S	S	B	R	D

- Turn off **lights** any time you leave a room.
- Keep the **refrigerator** door closed to save energy.
- Wash clothing in cold water to reduce the load on your water heater.
- Unplug items that consume **electricity** even when they're not in use, like cell phone **chargers** and coffee makers. These are known as "phantom load" **electronics**.
- Take **showers** instead of baths showers require less **water** use.

SPRING EFFICIENCY QUIZ

Spring is just around the corner! Take this quiz to learn how you can help save energy around your home. Hint: Check your work in the answer key below.



- Sealing air leaks around _____ saves energy and keeps your home comfortable.
 - A) doors B) windows C) both A and B
- 2. Unplug devices and electronics that consume energy even when they're not in use. like
 - A) refrigerators B) cell phone chargers
 - C) dishwashers
- 3. Ceiling fans cool people, not rooms, so turn them off when you leave the room to save energy.
 - A) True B) False
- 4. LED bulbs typically use _____ less energy than incandescent light bulbs.
 - A) 25% B) 50% C) 75%
- 5. Planting _____ around your home can block unwanted heat from the sun.
 - A) flowers B) shade trees C) vegetables



LINEWORKER GEAR WORD SEARCH

Did you know lineworkers wear special protective gear to keep them safe while working on power lines and other electrical equipment?

Read the descriptions to learn about a lineworker's gear and find the bolded words in the puzzle below.

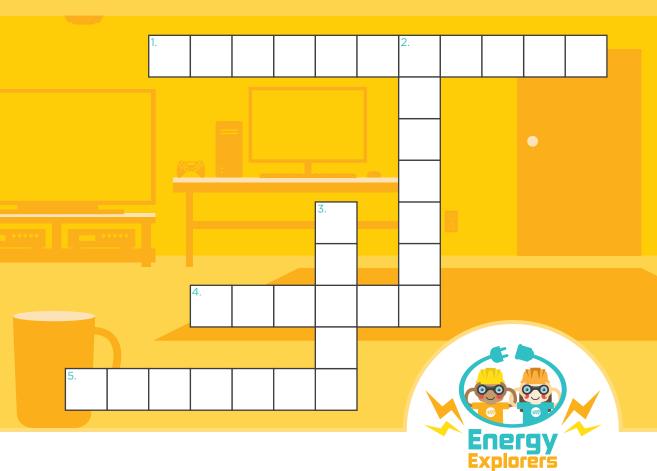
- **Safety goggles** keep debris away from lineworkers' eyes while on the job.
- Hard hats protect lineworkers from head injuries and falling debris.



- Work boots provide extra protection while lineworkers work with heavy materials that could fall near their feet.
- Flame-resistant clothing keeps lineworkers safe from electrical hazards.
- Insulated gloves protect lineworkers from electrical shock while working on power lines.



ELECTRICAL SAFETY CROSSWORD PUZZLE



May is Electrical Safety Month!

Read the safety tips below to complete the crossword puzzle.

1. ACROSS: Keep all liquids away from ______, like TVs, computers and gaming consoles. 2. **DOWN**: Never overload electrical _____. This creates a greater risk of fire. 3. **DOWN**: Never use electrical _____ that feel warm to the touch or are damaged in any way. 4. ACROSS: Smoke _____ should be installed in every bedroom, outside each sleeping area and on every level of your home. 5. ACROSS: Don't run electrical cords under rugs. This creates potential fire .



SUMMER ENERGY-SAVINGS WORD SEARCH

When you save energy at home, you're helping your family save money and protecting our environment.

Read the energy-saving tips below, then find and circle the bolded words in the puzzle.

- Close blinds and curtains on hot, sunny days to block additional heat from entering your home.
- Turn off lights and electronics, like TVs and stereos, when you leave a room.
- Turn off the water while you brush your teeth.



- Cooking with smaller appliances like slow cookers and toaster ovens use less energy than larger appliances.
- Unplug phone chargers when they're not in use - they consume energy even when they aren't charging devices.



POWER RESTORATION FILL-IN-THE-BLANK

When the power goes out, line crews work hard to restore service as quickly and safely as possible. Complete the fill-in-the-blank activity below to learn about the steps of power restoration. Use the word bank if you need help, and check your work in the answer key.



Word Bank:

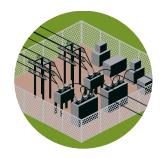
distribution pads

transformer substations

transmission



- **1.** High-voltage _____ lines are the large towers and cables that supply power to the greatest number of consumer-members. They rarely fail, but if they do, they have to be repaired first.
- **2.** Next, crews inspect distribution ______ for damage. They determine if the problem stems from the lines feeding into the equipment itself, or if the problem is further down the line.





- **3.** If the problem still can't be pinpointed,
 ______ power lines are inspected. These are the lines you typically see on the side of the road that deliver power to communities.
- **4.** If the power outage persists, supply lines (also known as tap lines) are inspected. These lines deliver power to transformers that are either mounted on poles or placed on ______ for underground electric service.





5. If your home remains without power, the service line between the _____ and your home may need repairs.

RENEWABLE ENERGY SOURCES WORD SEARCH

The electricity that powers our homes is generated by a variety of fuel sources, including renewables. Renewable energy comes from natural resources, like the wind and the sun. Can you find all the renewable energy-related words in the puzzle below?



Н S XWE S X F X G F Ε G Α Z L S S K R S Ν Q RLA S Т Q Ν В K M A RXВ Н D Υ W S K 0 Т R R Α Ε V G В 0 0 S S Ε S F В Р Α U Ν R Н В Т E Q R Ν Q В X X D F F D Ν F F D F R D Y D F N M G J Р Ν U R L BRR X Z Y Ε G M O D В Q Α Y Н D Z Т W Ζ Α W Ε Μ G Y S Α Ε S \bigcirc Α Р Ν U R X F Н Т 0 Ε G В Т Ν D Р J Ε Т Α Н K R G



WORD BANK:

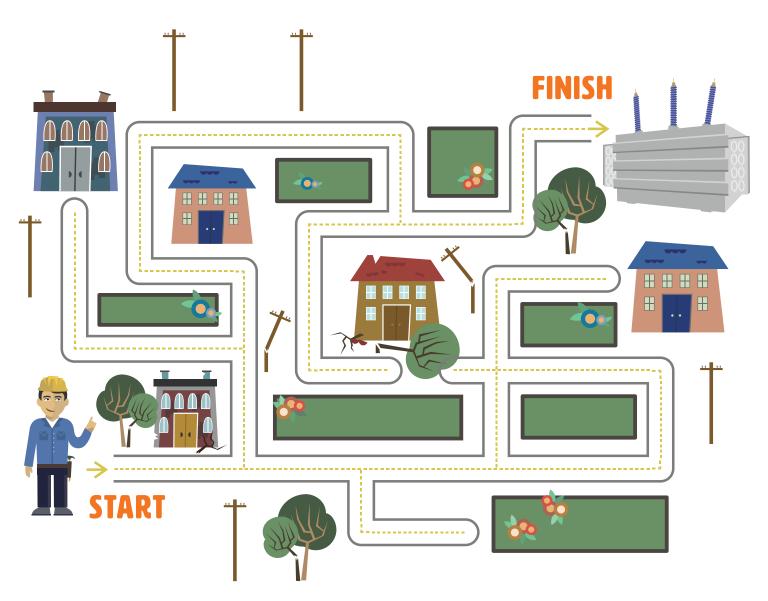
- HYDROPOWER
 GEOTHERMAL
- WIND TURBINE BIOMASS
- RENEWABLE
 GENERATION
- SOLAR PANELS
 SOLAR ENERGY
- WIND ENERGY

POWER OUTAGE MAZE ACTIVITY



If you've ever experienced a severe storm, you're probably familiar with power outages. Our local linemen come to the rescue and are responsible for fixing electrical damage to restore power to our homes.

Help the lineman get to the transformer to fix the power outage!



Energy Efficiency Calendar



Start the new year off by being more energy efficient!

Each month, try changing your energy use habits by using the tips below. Keep this calendar on your refrigerator to remind family members to be energy efficient throughout the year.



JANUARY

Turn off lights when you leave a room.

FEBRUARY

Remind family members to use cold water when washing clothes.

MARCH

Turn off water while brushing your teeth.

APRIL

Ask an adult to help you plant a tree to help shade your home in the summer.

MAY

Clean or replace your air filter. You may need to ask an adult to help.

JUNE

Keep the thermostat at 78 degrees Fahrenheit during summer months.



3

JULY

Close curtains and blinds during the day to block the sun.

AUGUST

Keep all doors and windows closed while the AC is running.

SEPTEMBER

Dry clothes outdoors on a clothesline instead of using the dryer.

OCTOBER

Only open the refrigerator door for short amounts of time when necessary.

NOVEMBER

Take short showers instead of a bath.

DECEMBER

Decorate your home for the holidays with energy-saving LED bulbs.

