

MINI-MEMBER ELECTRICAL INFORMATION WORKSHEETS



A Touchstone Energy® Cooperative 

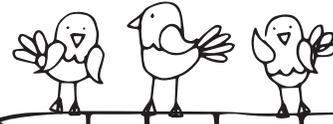


AMERICA'S ELECTRIC
COOPERATIVES



**Energy
Explorers**

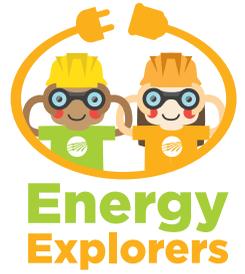
Spring Safety Coloring Sheet



Spring Safety Tip:

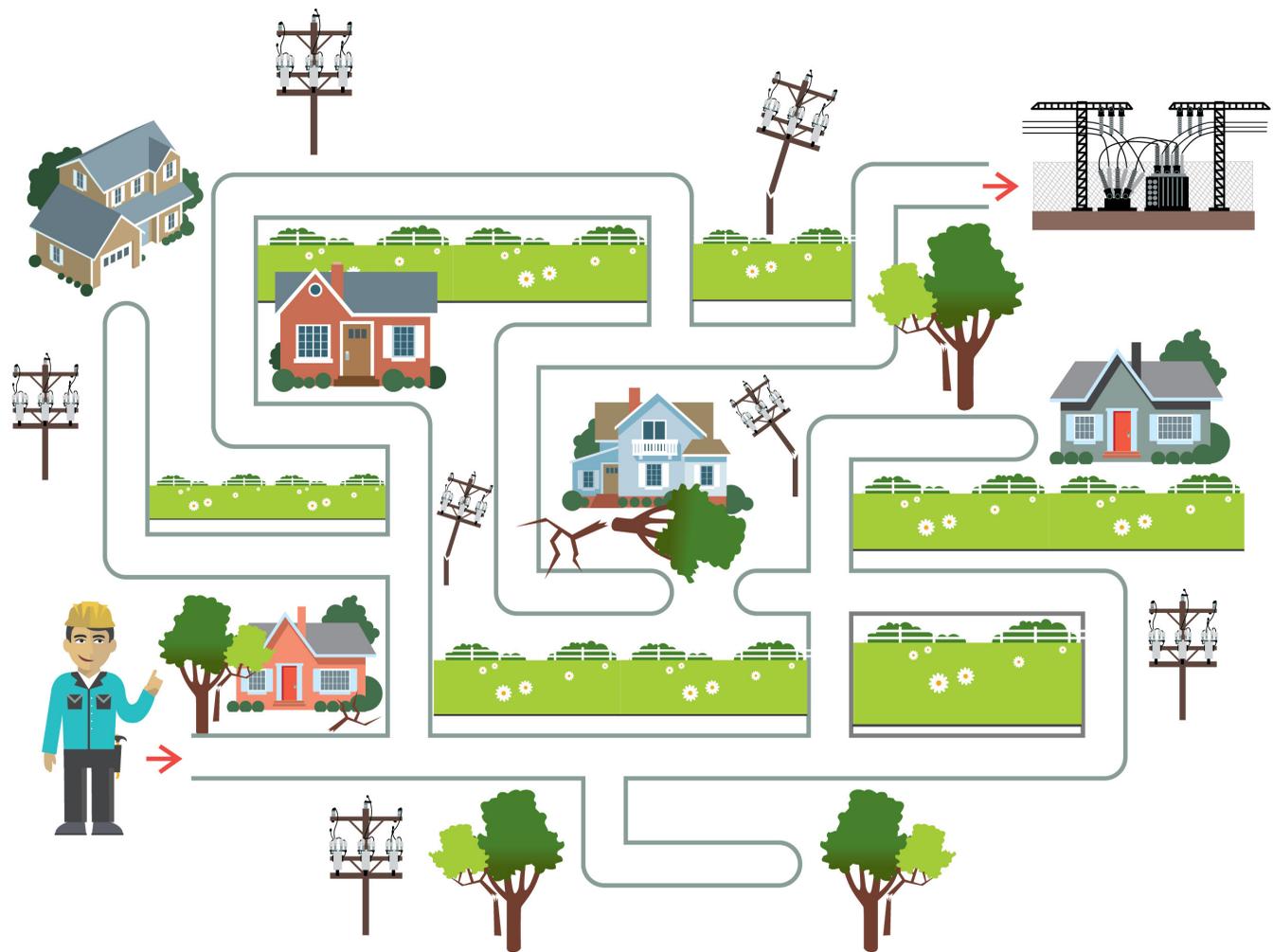
Never climb a tree that has power lines running through it!
Always avoid playing near electrical utility equipment.

HELP THE LINeworker REACH THE SUBSTATION



Lineworkers work in dangerous conditions to restore electricity after major storms and other types of power outages. Many times, lineworkers make substation repairs to get the power back on.

Can you help the lineworker get to the substation?



ENERGY CONSERVATION TIPS FOR KIDS!



Did you know there are small things you can do to help your family conserve energy at home? Fill in the blanks below to learn how you can help. Use the word bank below if you need a hint!

- 1 Turn the _____ off while you're brushing your teeth. You can save several gallons a month just by taking this simple step.
- 2 Any time you leave a room, remember to turn off the _____. Ask your parents if they use LED lights, which save the most energy!
- 3 With the help of your parents, _____ glass, plastic, paper and aluminum items.
- 4 When the heat or air conditioning is running, always keep _____ to the outside closed.
- 5 Take short _____ instead of baths to conserve water use.

Word Bank

Showers
Doors
Water
Recycle
Lights



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.

1. Taking a long bath saves more energy than taking a short shower.

A) True B) False

2. LED bulbs typically use _____ less energy than incandescent light bulbs.

A) 75% B) 50% C) 35%

3. Which of the following is an energy vampire? (Hint: Energy vampires consume energy even when they aren't being used.)

A) Dishwasher B) Electric mixer C) TV

4. If you see this logo on a product, it has an excellent energy efficiency rating.

A) ENERGY SMART B) ENERGY STAR C) ENERGY WISE

5. Turning off the tap water while brushing your teeth can save up to four gallons of water per minute.

A) True B) False

ANSWER KEY

ANSWERS: 1. B 2. A 3. C 4. B 5. A

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!



Energy Explorers

Hard Hat

Safety Goggles

Flame-Resistant Clothing

Insulated Gloves

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.



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



APPLIANCE WORD SEARCH

Did you know major appliances account for a large portion of your home's energy use?

Circle the names of all major appliances in the puzzle below.
Use the word bank for clues!

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

REFRIGERATOR

WASHING MACHINE

CLOTHES DRYER

DISHWASHER

MICROWAVE

OVEN

AIR CONDITIONER

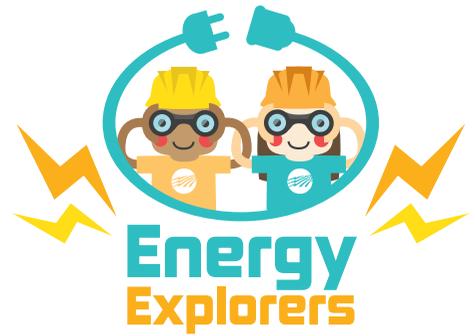
HEATER

STOVE

WATER HEATER

WORD BANK

ENERGY SAVINGS WORD SEARCH



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

Read the energy efficiency tips below and circle the **bolded** words in the puzzle.

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

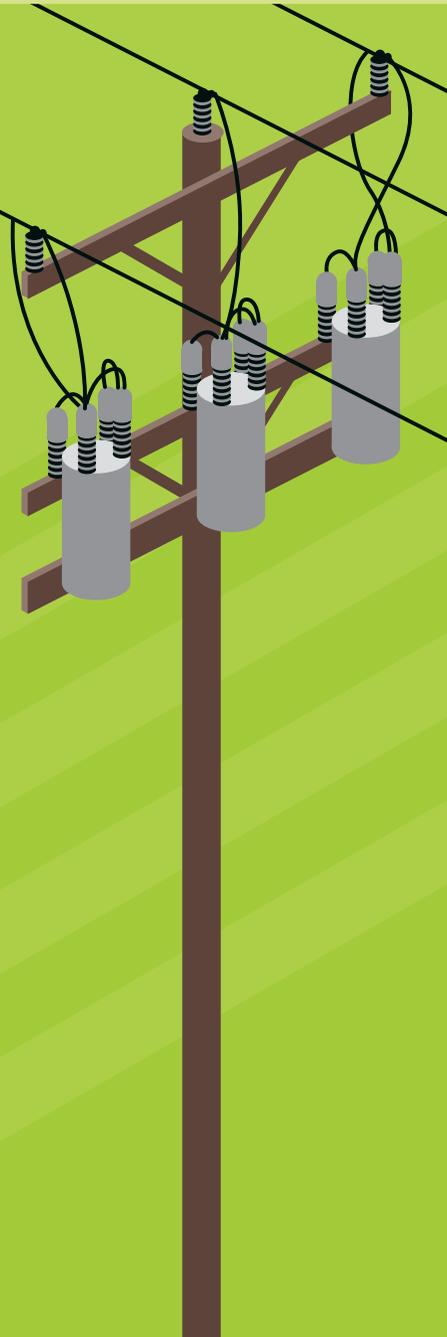
ELECTRICAL EQUIPMENT WORD SCRAMBLE



Electric co-ops use a variety of equipment to make sure you and your family receive reliable electricity. Can you unscramble the equipment terms below?

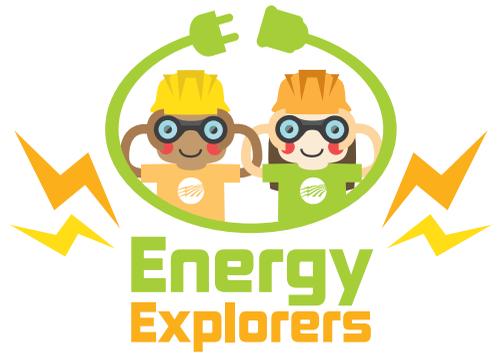
Use the provided clues for help, and double check your work in the answer key below.

- 1. ORNSTAMREFR** _____
These can look like large metal cans on top of utility poles or big green boxes on the ground. They are used to reduce the voltage of electricity, making it safe for use in your home.
- 2. OERPW NSLIE** _____
These can hang overhead or be placed underground. They carry electricity from where it's generated to homes and businesses in your community.
- 3. OUTASBSNTI** _____
This is an electrical facility that contains equipment for controlling the flow of electricity.
- 4. RCTLECIE ERMTE** _____
These devices are typically found outside the home and measure the amount of electricity you use.
- 5. CBUTKE KTURC** _____
Lineworkers use these types of vehicles to reach power lines and poles when making repairs and updates to the electrical system.



Answer Key: 1. TRANSFORMER 2. POWER LINES 3. SUBSTATION
4. ELECTRIC METER 5. BUCKET TRUCK

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.

1. 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%

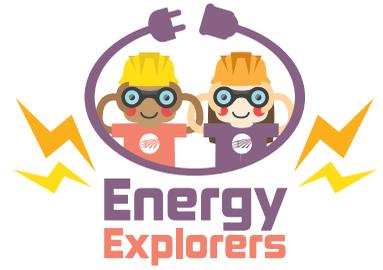
5. Planting _____ around your home can block unwanted heat from the sun.

A) flowers B) shade trees C) vegetables



Answer Key: 1. C 2. B 3. A 4. C 5. B

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.

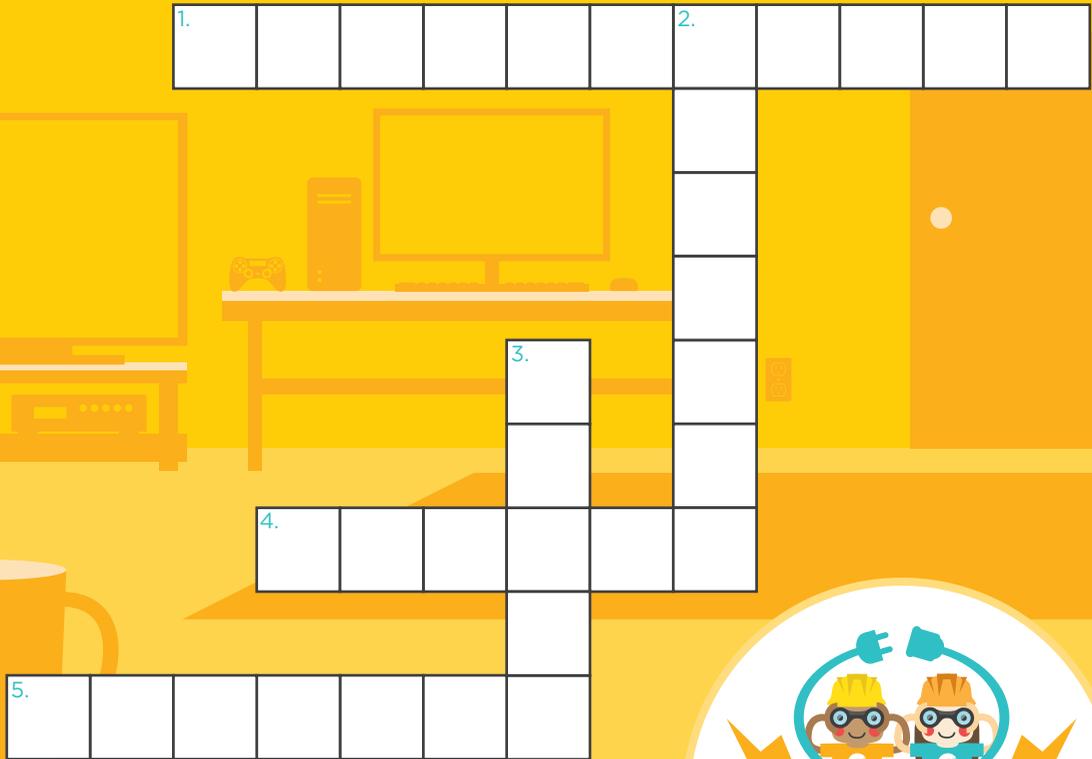
- **Safety goggles** keep debris away from lineworkers' eyes while on the job.
- **Hard hats** protect lineworkers from head injuries and falling debris.
- **Work boots** provide extra protection while lineworkers work with heavy materials that could fall near their feet.
- **Flame-resistant** clothing keeps lineworkers safe from electrical hazards.
- **Insulated gloves** protect lineworkers from electrical shock while working on power lines.
- **Equipment belts** hold several tools that lineworkers need to get the job done.



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



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 _____.