BGE WIRES DOWN VIDEO CHALLENGE

BGE
An Exelon Company

THAT'S SMART ENERGY℠

CHANCE TO WIN $10,000 IN GRANT FUNDING!

BGE WIRES DOWN VIDEO CHALLENGE

HERE'S HOW IT WORKS:

1. Discuss electric safety with your class

- Review and use the lesson plans found on pages 11–24 which align with Maryland STEM Standards of Practice and are specialized for each grade level.
- Review the electric safety information on page 9 and 10 of this entry kit.
- Complement your electric safety lesson plan with free curriculum-based games, teacher's guides, worksheets and activities that follow Maryland Content Standards in science and health, available at **BGE-Education.com**.

2. Prepare your entry

- For inspiration, watch BGE's original *Wires Down* commercial on **BGEVideoChallenge.com**.
- Read the contest rules and regulations.
- Plan and create your own adaptation of BGE's original *Wires Down* commercial—must be between 30 and 45 seconds long.
- Use the same lyrics as the original commercial, but feel free to experiment with the melody.
- Feature only students in grades K-5 from your school in on-camera roles

This year, WBAL-TV meteorologist Ava Marie will serve as the celebrity judge for the BGE Wires Down Video Challenge. BGE and WBAL-TV will be working together to spread the word about electric safety. Follow @WBAL-TV11, @AvaWBAL and @myBGE on all social media platforms for the latest contest updates.

3. Upload your entry

- Use the Eligibility Checklist on page 3 to make sure your video meets the contest guidelines.
- Be sure to fill out the online entry form. Your completed entry should include your video (100 megabytes or less), description of your enrichment project and a W-9 for your school.
- You must upload you waiver form(s) completed by guardians for each student appearing in the video with your contest entry by April 3, 2020.
- NOTE: All signed waivers must be received (uploaded) by April 3, 2020.

THE DOWNLOADABLE ENTRY KIT INCLUDES:

- Promotional flyer
- Official rules & regulations
- Eligibility Checklist
- BGE logo art
- Lyrics from the original *Wires Down* commercial
- Sheet music for the *Wires Down* song
- Parent Waiver/Usage form
- FAQs
- Electric safety introduction lesson plan
- Editable and printable student participation certificate
- W-9 form

Please review the rules & regulations and FAQs. Additional questions may be emailed to **VideoChallengeInfo@BGE.COM**.

WINNERS ANNOUNCED IN MAY.

BGE WIRES DOWN VIDEO CHALLENGE

VIEW AND VOTE FROM APRIL 13–26, 2020

- Look for eligible videos to be posted on **BGEVideoChallenge.com** on April 8, 2020.
- Vote up to three times per day for your favorites. Tell your friends and family to vote too!
- Find out in May 2020 which videos won the following awards:

$10,000 BGE STAR POWER AWARD
For the highest total score after the Finalist Judging Phase. Additionally, the facilitator for the BGE Star Power Award will be awarded a $500 gift card

$5,000 BGE SPOTLIGHT AWARD
For the second highest total score

$3,000 BGE CAST & CREW AWARD
For the highest score in the student effort and teamwork category

$3,000 BGE DIRECTOR'S CUT AWARD
For the highest score in the creativity category

$3,000 BGE MUSIC MAESTRO AWARD
For the highest score in the "Wires Down" rendition category

$1,000 BGE SPECIAL JUDGES PANEL AWARD
For the one contest entry that stood out for quality, creativity and teamwork, as determined by the judges.

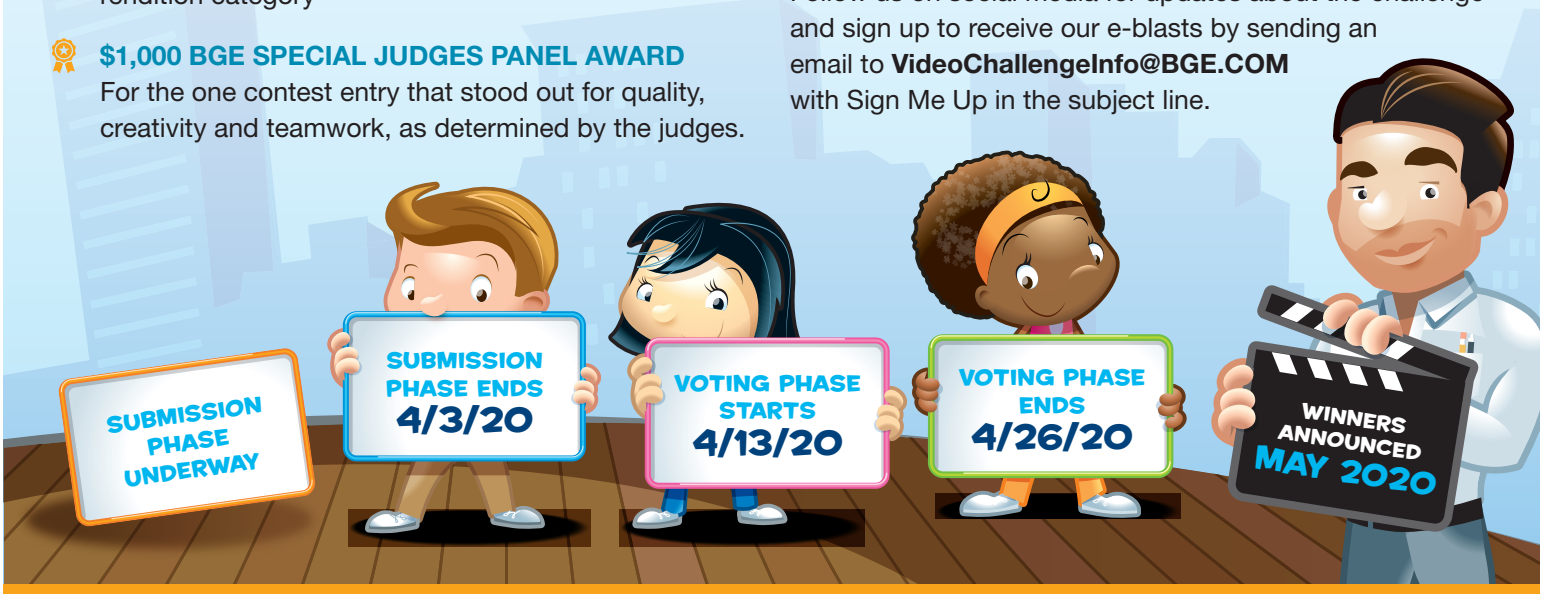
$1,000 BGE SCREEN GEM AWARDS
For the finalist in each participating county with the highest total score that has not won another award

$100 BGE TEACHER AWARDS
For the facilitators of the prior referenced awards, except for the Star Power Award, to purchase classroom supplies

ROCK THE VOTE! AWARD
For the contest entry that received the highest number of votes during the public voting phase will receive a BGE branded backpack for each participating student

All participating schools will receive BGE participation prizes.

Follow us on social media for updates about the challenge and sign up to receive our e-blasts by sending an email to **VideoChallengeInfo@BGE.COM** with Sign Me Up in the subject line.



GIVE YOUR ENTRY ITS BEST CHANCE. RUN THROUGH THIS QUICK CHECKLIST.

BGE WIRES DOWN VIDEO CHALLENGE

Your video **SHOULD**:

- ☐ Only be entered if your school is located within BGE's electric service delivery territory.
- ☐ Use the lyrics of the original *Wires Down* commercial. Should you also choose to use the music, you can download the background music from this entry kit or use the music sheet to have your school band create your own music.
- ☐ Include only students from your school, in grades K-5, in on-camera roles.
- ☐ Be between 30 seconds and 45 seconds in length.
- ☐ Include a contact for your video, who can be a teacher or administrator from the submitting school.
- ☐ Include a brief description of how prize money would be used to enrich the school (see contest rules and regulations for more details).
- ☐ Upload signed waivers (from parents/guardians) for all on-camera students, at **BGEVideoChallenge.com** with contest entry.
- ☐ Be uploaded to **BGEVideoChallenge.com** website by 11:59 p.m. on April 3, 2020.
- ☐ Be submitted in mp4 format and must be 100 megabytes or less in size.

Your video **SHOULD NOT**:

- ✗ Depict unsafe practices, especially related to electricity or downed wires.
- ✗ Depict the effects of electrical injury or accident by touching wires or coming in contact with wires. No student in your video, even those pretending to be a BGE lineworker, should be within arms length of a depicted wire.
- ✗ Include any inappropriate language or actions.
- ✗ Include any copyrighted lyrics, music or video footage.
- ✗ Include, in on-camera roles, any children of employees of BGE or Weber Shandwick, and their respective parents, subsidiaries, retailers, affiliates, promotion and advertising agencies (collectively, the *Contest Entities*) and members of their immediate family (spouse, mother, father, sister, brother, ward, daughter or son and their respective spouses, regard less of where they reside) and persons living in the same household of such employees, whether or not related.
- ✗ Contain any personal identification, such as license plate numbers, personal names, email addresses or street addresses.

QUESTIONS? THE ANSWERS ARE HERE!

BGE WIRES DOWN VIDEO CHALLENGE

Q. HOW DO I KNOW IF MY SCHOOL IS ELIGIBLE?

A. The video challenge is open to all public and private schools designated as a 501(c)(3), grades K–5, that receive electric delivery service from BGE.

Q. WHAT IS THE GOAL OF OUR VIDEO?

A. The goal is to educate and promote electric safety, both inside and outside of the classroom, through the creation of your own rendition of the BGE *Wires Down* commercial.

Q. WHO CAN TAKE PART IN THE VIDEO PRODUCTION?

A. We encourage schools to make the video production a team project. Anyone can take part in off-camera roles such as set building, prop making, singing, sound effects, etc. On-camera roles are reserved for students in grades K-5 only. Children whose parents/guardians are employees of BGE or Weber Shandwick may not appear on camera.

Q. WHAT IS A SCHOOL ENRICHMENT PROJECT?

A. An enrichment project includes any learning opportunity or activity that engages students in developing essential knowledge, skills, values, and relationships as a vehicle for inspiring learning and encouraging academic and life success. School projects for math, science, reading, language arts, fine and performing arts, social studies, technology and career/vocational are encouraged.

Q. WHAT IF WE SUBMIT A VIDEO AND IT'S NOT A VALID ENTRY?

A. If the video your school uploads does not meet the guidelines of the contest, then your school's contact person will be notified. You may then make changes and re-submit. Your final video must be submitted by the April 3, 2020 contest entry deadline.

Q: HOW IMPORTANT IS ONLINE PUBLIC VOTING

A. Online public voting is used to determine which entries will advance to the final judging period. It is important to note: winners are decided based on the scores they receive during the final judging period, not based on popularity.

Q. HOW WILL THE FINALISTS BE JUDGED?

A. A panel of judges from BGE will score the finalists on their interpretation of the original commercial, creativity, demonstrated teamwork, depiction of electrical safety and vocal and/or instrumental rendition of the *Wires Down* song. Specifically, the judges on the final panel will score each video using the following criteria:

- ☆ 20% creativity
- ☆ 20% overall impression
- ☆ 20% ability of participating students to depict electric safety
- ☆ 20% quality of *Wires Down* rendition
- ☆ 20% the amount of student effort and teamwork depicted in the entry

In the event of a tie for the overall winner, the finalist receiving the highest score in "creativity" during the final judging phase will be the winner. In all other categories, BGE will select a "tie-breaking" judge who will select the winner.

Q. WHERE CAN OUR CLASS LEARN MORE ABOUT ELECTRIC SAFETY?

A. BGE strongly encourages educators to take advantage of a wealth of free information available on the e-Smart Kids website (**BGE-Education.com**) and the worksheets and activities that follow Maryland Content Standards in science and health included in this entry kit. BGE's top priority is safety. Our goal with this video challenge is to encourage electric safety for all ages and teach children to be aware of potential hazards surrounding electricity. You'll find a direct link to classroom learning materials on the contest website.

Q. WHAT IF I HAVE QUESTIONS ABOUT THE RULES & REGULATIONS?

A. First, carefully review the contest description, FAQs on this page, and the official rules & regulations. If you still have questions, email us at **VideoChallengeInfo@BGE.COM**. We will be happy to clarify any of the rules and regulations, but we cannot assist you in producing the video.

Q. DOES MY SCHOOL NEED TO SUBMIT A W-9?

A. Yes. You will need to upload your school's W-9, which needs to be signed and dated in the last six months. You can complete a W-9 here.

SING ALONG WITH US!

BGE WIRES DOWN VIDEO CHALLENGE

LYRICS:

Wires down, **RED ALERT**
Don't go near, you'll get hurt
GET SOME HELP, better rush
And do not, do not, **DO NOT TOUCH!**

BGE knows what is best
CALL ON US that's our request
Get some help, **BETTER RUSH**
And do not, do not, **DO NOT TOUCH!**

PLAY ALONG WITH US!

BGE WIRES DOWN VIDEO CHALLENGE

A

Wir - es down red a - lert don't go near

F m/C F m/C C C F m/C C F m/C

Piano

simile

F m/C F m/C C C F m/C C F m/C

Guitar

simile

Bass Guitar

Flute

Clarinet in B♭

Alto Sax

simile

Tenor Sax

simile

Trumpet in B♭

Horn in F

simile

Trombone

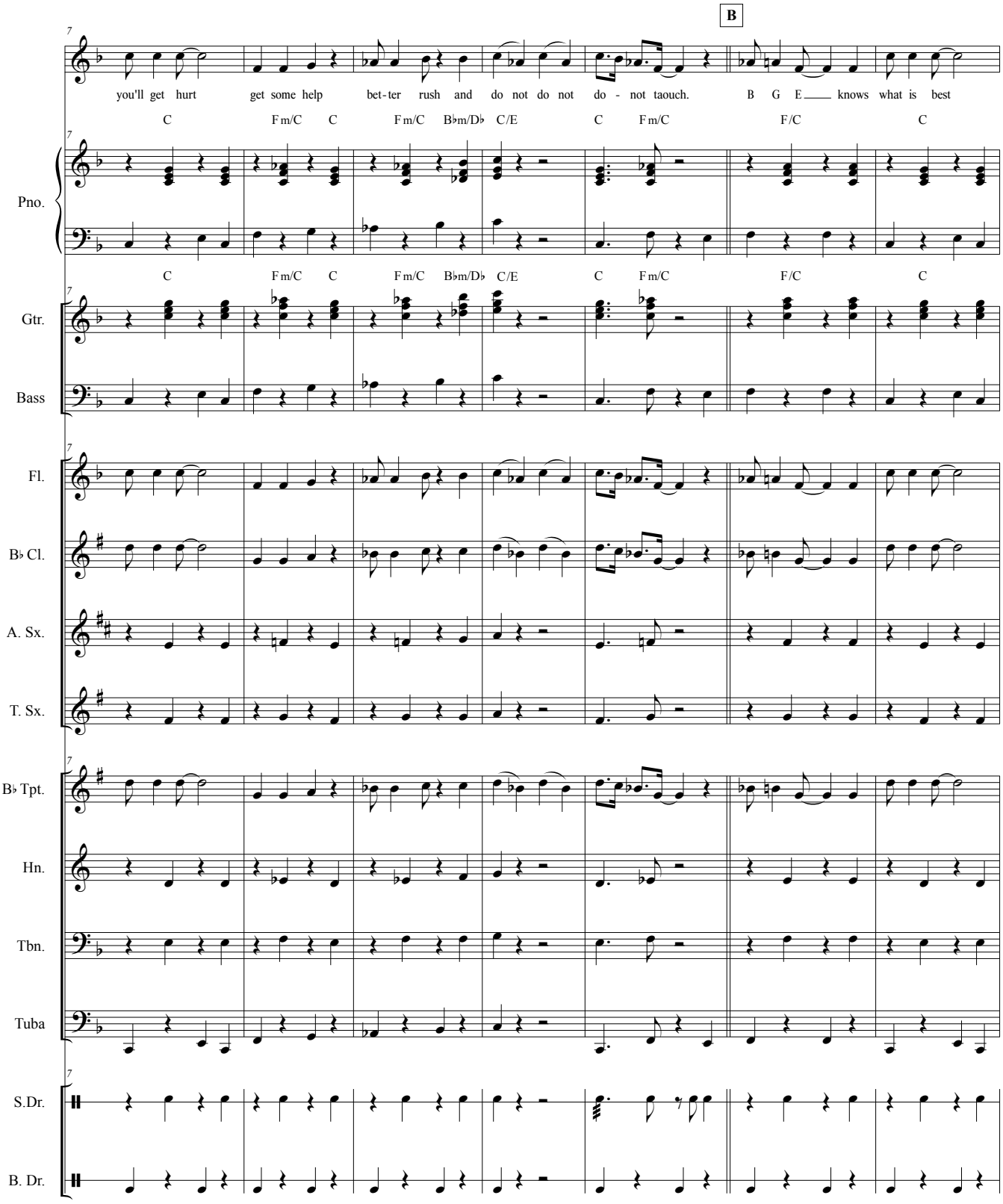
simile

Tuba

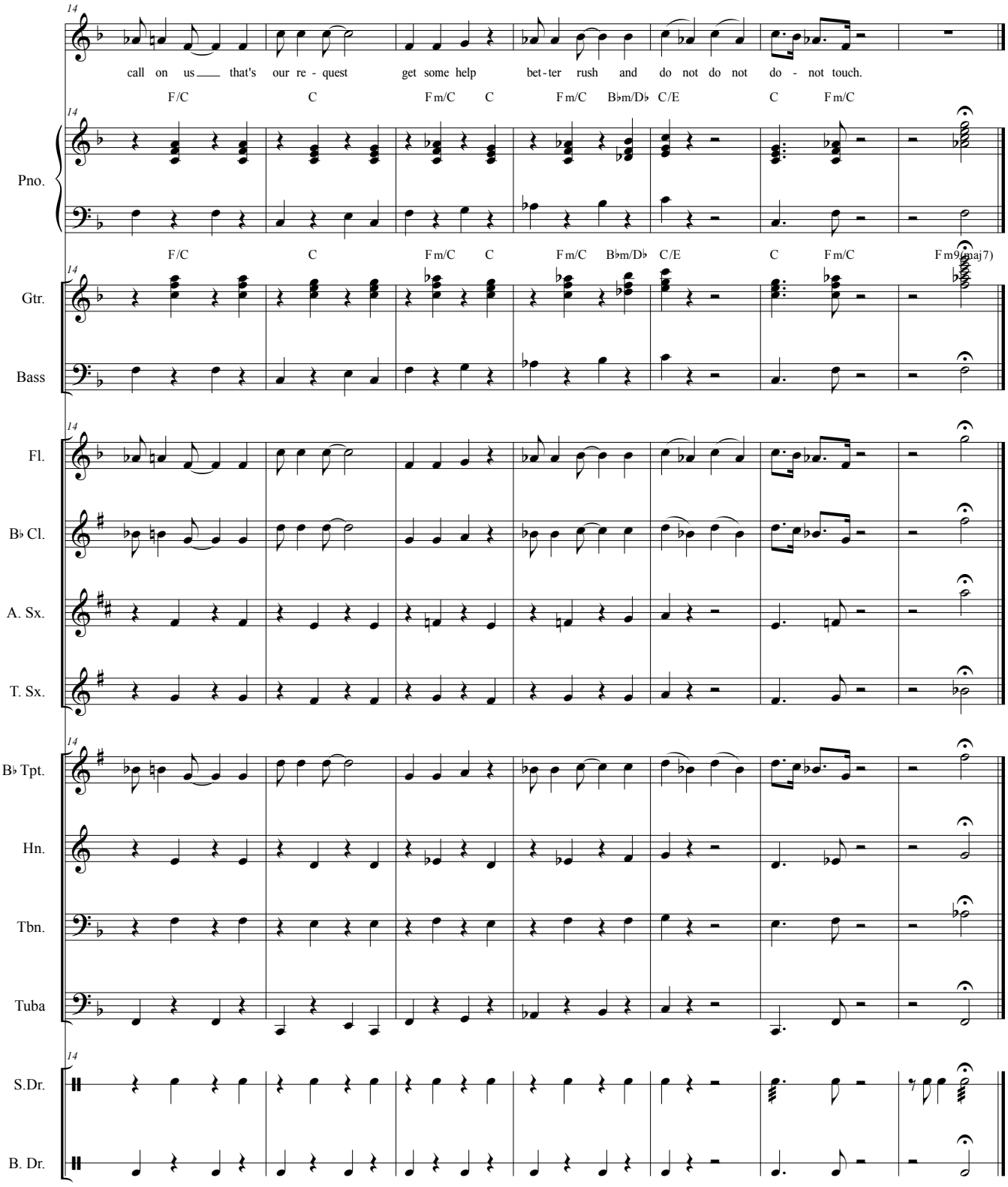
Snare Drum

Bass Drum

SHEET MUSIC CONTINUED (2-3)



SHEET MUSIC CONTINUED (3-3)



AN INTRODUCTION TO ELECTRIC SAFETY

Important information your students should know.

BGE WIRES DOWN VIDEO CHALLENGE

WHAT IS ELECTRICITY?

To you, electricity is what runs through the wire from the wall outlet, or from a battery to make things work. Think about how many things in your life need electricity to work!

But what is it? Where does it come 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.

ELECTRICITY LIKES TO TRAVEL.

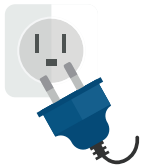
Electricity is generated in a power plant and then sent over high-power transmission lines on tall towers that you often see out in grassy fields. Electricity travels fast: 186,000 miles an hour! Once it gets closer to your house, special equipment called transformers reduce the high amount of electricity being sent over the power lines to the right amount of electricity for your home.

THE IMPORTANCE OF ELECTRIC SAFETY.

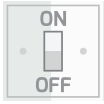
Electricity likes to travel—through power lines designed to carry it, and through anything else that will allow the electric current to flow to its natural destination: the ground. Good drivers of electricity include metal, water, and unfortunately—people. When electric current flows through a human body, it can be very harmful, and even fatal. That's why safety around electricity is so important.

HOW CAN YOU TAKE STEPS TO BE SAFE?

In your home:



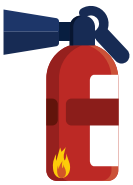
- Never stick toys, metal, fingers or anything else into an electric outlet. If you have younger brothers or sisters, have your parents use outlet guards to cover outlets not in use.
- Water and electricity don't mix well! Keep cords and appliances away from any liquid.
- Watch for frayed electrical cords. Don't pull plugs by the cord. And don't overload an outlet with too many plugs.
- Turn off lights, electric appliances, electronics, heaters and other devices when not in use.



If you see a downed wire:

- First and foremost, stay away from the downed wire and warn others. Call BGE or tell an adult to call BGE immediately at **877.778.2222** and we will come to fix the problem.
- Never assume a wire is safe to touch.
- If a downed wire comes in contact with a car that you're in, stay in the car until help arrives. Warn others not to touch the car.

If there's an electrical fire:



- If the fire involves an electrical outlet, cord or appliance, don't ever use water to put it out. Water conducts electricity, so the fire will actually spread.
- Tell an adult. Have them use a chemical fire extinguisher if one is available.
- If one is not available, leave the house or building and call 911. Tell first responders it's an electrical fire.

ELECTRIC SAFETY CONTINUED

Important information your students should know.

When overhead lines are nearby:

- Never play within 10 feet of overhead lines. That's a law. If you're not sure whether lines are for power, telephone, or cable—ALWAYS ASSUME THEY ARE ENERGIZED AND STAY CLEAR.
- Don't build or place play equipment such as playhouses, tree forts or swimming pools under or near power lines.
- Avoid flying kites, model airplanes or other toys near lines. If they become caught in lines, don't try to remove them! Have a parent or adult call **800.685.0123.**
- Don't ever climb utility poles, towers or trees that are close to power lines.

KIDS WANT TO KNOW!

How was electricity discovered?

People have known about electricity for a long time, but it has only been produced and used for about 250 years. Benjamin Franklin first sparked interest in electric properties with his kite experiments in the mid 1700s. The real breakthrough, however, came in 1831 when a British scientist named Michael Faraday discovered that he could create an electric current by moving magnets inside coils of copper wire. That basic process of *electromagnetic induction* is still used in power plants today. Although electricity was originally used in only the most basic ways (telegraph, light bulb, telephone), its use became more and more widespread with radio, TV, and household appliances. Today, the energy required to support the internet, computers, mobile devices and even cars will continue to increase the demand for electricity.

What is an electric shock?

Broadly speaking, an electric shock is what happens when a person or animal comes into contact with an electrical energy source and that energy flows through a portion of their body. As the energy flows through, it may result in no injury at all or may result in great harm or even death.

What is lightning?

Lightning is a large discharge of static electricity. During a thunderstorm, clouds build up a charge. When there is a big difference in charge between the cloud and its surroundings, the cloud discharges a lightning bolt.

Can fish be struck by lightning?

Yes. Fish near the surface of the water may be electrocuted when lightning strikes and electricity spreads out along the surface.

Are electric eels really electric?

Yes! These eels use chemicals in their body to produce a charge of up to 650 volts—which is five times the shocking power of a household outlet.

Why can a bird stand on a power line and not get shocked?

Since the bird is not touching the ground, electricity has no reason to go through the bird—so electricity continues through the wires. Now if a bird with big wings touches a tree or power pole, electricity will flow through the bird and down to the ground, shocking the bird.

NEW LESSON PLANS

We have included lesson plans that teach elements of STEAM. STEAM education integrates the content and skills of science technology, engineering and mathematics into the classroom. Through STEAM education, students are challenged to answer complex questions, investigate global issues, solve real world problems and meet global challenges through hands-on, relevant, inquiry-based learning experiences.

The lesson plans included in this entry kit are designed to help teachers facilitate student engagement, incite questions and lead students through problem-solving related to electric topics. We hope to inspire the next generation of scientists, engineers and mathematicians.

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KINDERGARTEN LESSON PLAN

LEARNING OBJECTIVES:

- ☆ Name grade level appropriate concepts related to electric safety
- ☆ Draw or write symbols learned from the electric safety lesson plan
- ☆ Retell electric safety content to answer questions or solve problems
- ☆ Participate in conversations with adults and peers about electric safety

LESSON 1: POWERED BY ELECTRICITY

Materials

- ❑ Kindergarten Activity Sheet
- ❑ *Electricity Basics* Video
- ❑ Pencils, Markers or Crayons
- ❑ Additional websites and resources listed below
- ❑ Wires Down Entry Kit

Directions

1. Ask your students to think independently about all the appliances their families use at home. Have them raise their hands and share the appliances they use at home with the class.
2. Next, ask them if they know how many of those appliances use electricity to work.
3. After taking a few responses from the class, play the *Electricity Basics* video available on the e-SMART Kids portal.
4. Following the video, ask the students if they can list all the ways electricity can be produced.
5. Finally, using the activity sheet, have the students circle the appliances that might use electricity in their home.

Answers:

1) REFRIGERATOR 2) HAIR DRYER 3) TV

KINDERGARTEN LESSON PLAN

LEARNING OBJECTIVES:

- ☆ Name grade level appropriate concepts related to electric safety
- ☆ Draw or write symbols learned from the electric safety lesson plan
- ☆ Retell electric safety content to answer questions or solve problems
- ☆ Participate in conversations with adults and peers about electric safety

LESSON 2: ELECTRIC SAFETY 101

Materials

- ❑ Kindergarten Activity Sheet
- ❑ Wires Down Entry Kit
- ❑ Pencils, Markers or Crayons
- ❑ *Outdoor Electrical Safety* Video

Directions

1. Addressing the entire class, tell them they are going to learn about outdoor electrical safety.
2. Play for the students the *Outdoor Electrical Safety* video available on the e-SMART Kids portal.
3. Following the video, ask your students how they can stay safe outdoors.
4. Following the video, ask the students if they can list all the ways electricity can be produced.
5. To reinforce how the students can remain safe around electricity outdoors, have them select which activities are unsafe.

Answers:

1) FLYING A KITE NEAR A POWER LINE 2) CLIMBING A TREE NEAR AN OVERHEAD POWER LINE

KINDERGARTEN ACTIVITY

ACTIVITY 1: WHICH APPLIANCES USE ELECTRICITY?

There are many things in your home that require electricity to work. Circle the 3 items that require electricity:

Refrigerator

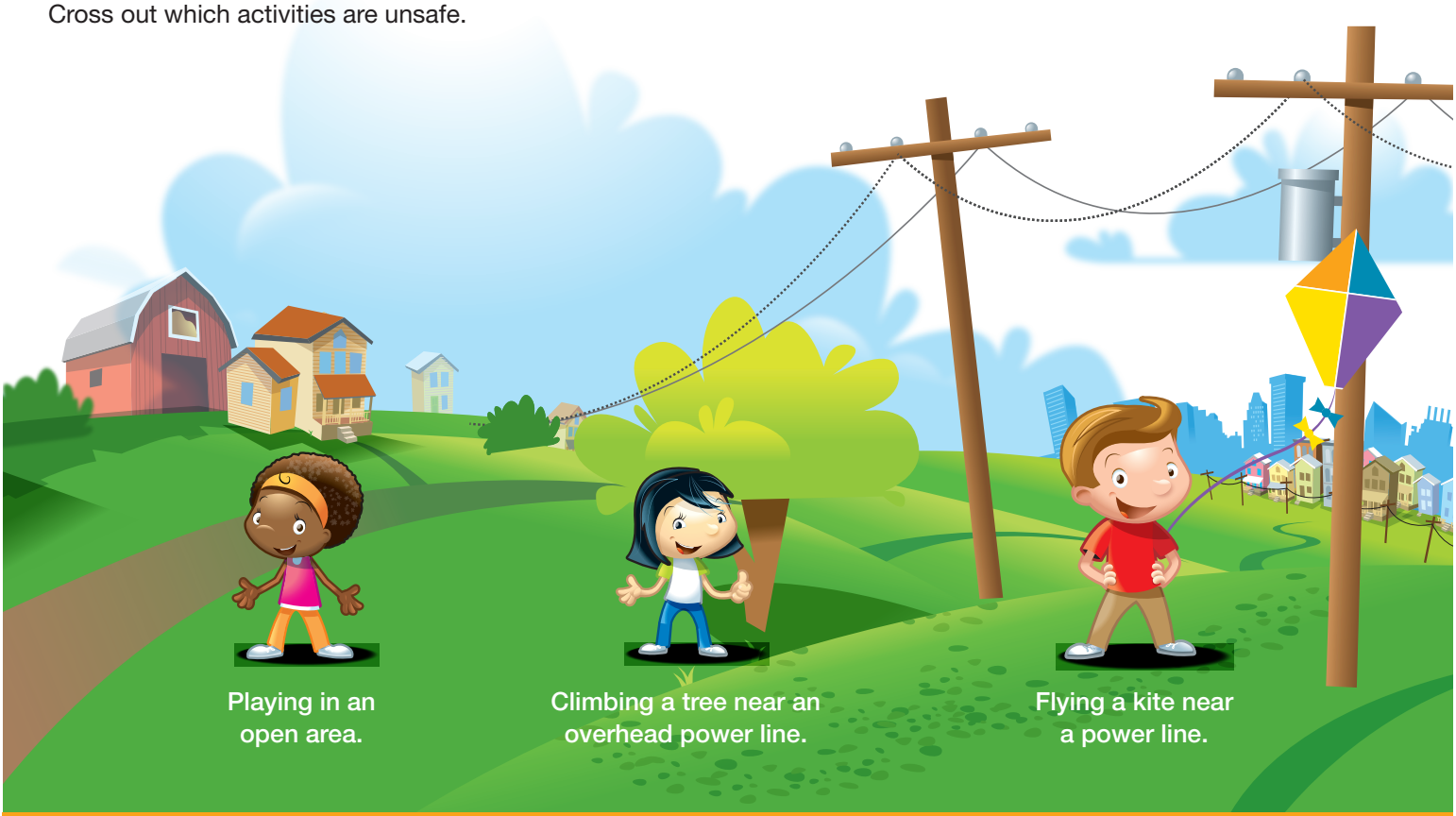
Hair Dryer

Grill

TV

ACTIVITY 2: OUTDOOR ELECTRICAL SAFETY

With all the electrical lines around, there are a few activities that should be avoided to stay safe outdoors. Cross out which activities are unsafe.



Playing in an open area.

Climbing a tree near an overhead power line.

Flying a kite near a power line.

KINDERGARTEN ASSESSMENT

ASSESSMENT

After utilizing the plans included in this Kindergarten Lesson Plan packet, your class will have gained many takeaways about electric safety. As a final activity, work with the class to answer the assessment questions included below.

1. Where is electricity produced?
   a. Overhead electrical wires
   b. Light switch
   c. Power plant
   d. Electrical plug

2. Electricity can be produced by using the energy of:
   a. Moving water
   b. Solar power
   c. Fossil fuels (natural gas, oil, or coal)
   d. All of the above

3. What should you do if you notice a downed electrical wire?
   a. Move the wire
   b. Get help, and tell an adult to call BGE
   c. Ignore the wire
   d. Play near the wire

4. You should never climb a tree if it …
   a. Has no leaves
   b. Is in direct sunlight
   c. Is in within 10 feet of an overhead electrical wire
   d. Is in a park

5. How might electricity be used safely in your home?
   a. Powering the lights in your home
   b. Keeping the food in your refrigerator chilled
   c. Heating your stove to help your parents cook
   d. All of the above

Answers:

1) c 2) d 3) b 4) c 5) d

FIRST/SECOND GRADE LESSON PLAN

LEARNING OBJECTIVES:

- ☆ Name grade level appropriate concepts related to electric safety
- ☆ Draw or write symbols learned from the electric safety lesson plan
- ☆ Retell electric safety content to answer questions or solve problems
- ☆ Participate in conversations with adults and peers about electric safety

LESSON 1 : POWERED BY ELECTRICITY

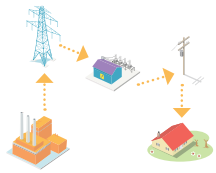
Materials

- ❑ First/Second Grade Activity Sheet
- ❑ Pencils, Markers or Crayons
- ❑ Wires Down Entry Kit
- ❑ *Electricity Basics* Video
- ❑ Additional websites and resources listed below

Directions

1. Ask your students to think independently about all the appliances their families use at home. Have them raise their hands and share the appliances they use at home with the class.
2. Next, ask the students if they know how electricity makes it to their home.
3. After taking a few responses from the class, play the *Electricity Basics* video available on the e-SMART Kids portal.
4. Following the video, ask the students if they can list all the ways electricity can be produced.
5. Finally, have the students trace the electricity supply and delivery graphic to reinforce how electricity makes it to the home.

Answer:



FIRST/SECOND GRADE LESSON PLAN

LEARNING OBJECTIVES:

- ☆ Name grade level appropriate concepts related to electric safety
- ☆ Draw or write symbols learned from the electric safety lesson plan
- ☆ Retell electric safety content to answer questions or solve problems
- ☆ Participate in conversations with adults and peers about electric safety

LESSON 2: ELECTRIC SAFETY 101

Materials

- ❑ First/Second Grade Activity Sheet
- ❑ Pencils, Markers or Crayons
- ❑ Wires Down Entry Kit
- ❑ *Outdoor Electrical Safety* Video
- ❑ Additional websites and resources listed below

Directions

1. Addressing the entire class, tell them they are going to learn about outdoor electrical safety. Ask them if they've ever seen power lines close to areas they play.
2. Play for the students the *Outdoor Electrical Safety* video available on the e-SMART Kids portal.
3. Following the video, ask your students how they can stay safe from electrical dangers when playing outside.
4. Finally, have the students complete the electric safety word scramble included in the activity sheet.

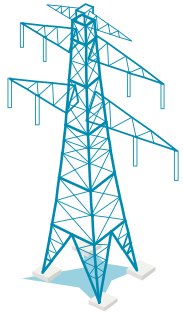
Answers:

1) DIG SAFE 2) CONDUCTORS 3) HIGH VOLTAGE 4) POWER LINES 5) CALL 811 4) SAFETY

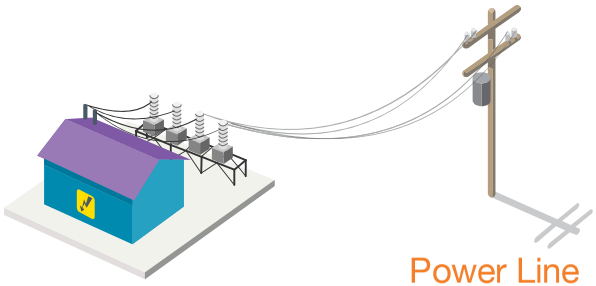
FIRST/SECOND GRADE ACTIVITY

ACTIVITY 1: HOW ELECTRICITY GETS TO YOUR HOME

There are many steps between where electricity is created and how it reaches your home. Draw arrows between each stop along electricity distribution path to get energy to your home.

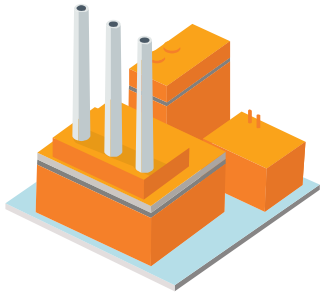


Transmission Tower



Substations

Power Line



Plant

Your home

ACTIVITY 2: WORD SCRAMBLE

Key electric safety vocabulary words.

1. GID FASE

_____

2. CODNUCROTS

_____

3. HGIH OLTAVGE

_____

4. WEPOR ISLEN

_____

5. ALCL 181

_____

6. TAYEFS

_____

WORD BANK:

HIGH VOLTAGE
POWER LINES
CONDUCTORS
CALL 811
SAFETY
DIG SAFE

FIRST/SECOND GRADE ASSESSMENT

ASSESSMENT

After utilizing the plans included in this First/Second Grade Lesson Plan packet, your class will have gained many takeaways about electric safety. As a final activity, work with the class to answer the assessment questions included below.

1. Where is electricity produced?
   a. Overhead electrical wires
   b. Light switch
   c. Power plant
   d. Electrical plug

2. Electricity can be produced by harnessing the energy of:
   a. Moving water
   b. Solar power
   c. Fossil fuels (natural gas, oil, or coal)
   d. All of the above

3. What should you do if you notice a downed electrical wire?
   a. Move the wire
   b. Get help, and tell an adult to call BGE
   c. Ignore the wire
   d. Play near the wire

4. You should never climb a tree if it …
   a. Has no leaves
   b. Is in direct sunlight
   c. Is in within 10 feet of an overhead electrical wire
   d. Is in a park

5. How might electricity be used safely in your home?
   a. Powering the lights in your home
   b. Keeping the food in your refrigerator chilled
   c. Heating your stove to help your parents cook
   d. All of the above

Answers:

1) c 2) d 3) b 4) c 5) d

THIRD–FIFTH GRADE LESSON PLAN

LEARNING OBJECTIVES:

- ☆ Name grade level appropriate concepts related to electric safety
- ☆ Draw or write symbols learned from the electric safety lesson plan
- ☆ Retell electric safety content to answer questions or solve problems
- ☆ Participate in conversations with adults and peers about electric safety

LESSON 1: POWERED BY ELECTRICITY

Materials

- ❑ Third–Fifth Grade Activity Sheet
- ❑ Pencils, Markers or Crayons
- ❑ Wires Down Entry Kit
- ❑ *Electricity Basics* Video
- ❑ Additional websites and resources listed below

Directions

1. Let your class know they'll be learning about electricity and how it gets to their homes.
2. Next, ask the students if they know how electricity is produced and travels to their home.
3. After taking a few responses from the class, play the *Electricity Basics* video available on the e-SMART Kids portal.
4. Following the video, ask the students if they can list all the ways electricity can be produced.
5. Finally, have the students complete the electric safety word scramble exercise included in the activity sheets.

Answers:

1) POWER PLANT 2) FOSSIL FUELS 3) SUBSTATION 4) CIRCUT 5) GROUNDING 4) TEN FEET

THIRD–FIFTH GRADE LESSON PLAN

LEARNING OBJECTIVES:

- ☆ Name grade level appropriate concepts related to electric safety
- ☆ Draw or write symbols learned from the electric safety lesson plan
- ☆ Retell electric safety content to answer questions or solve problems
- ☆ Participate in conversations with adults and peers about electric safety

LESSON 2: ELECTRIC SAFETY 101

Materials

- ❑ Third–Fifth Grade Activity Sheet
- ❑ Pencils, Markers or Crayons
- ❑ Wires Down Entry Kit
- ❑ *Outdoor Electrical Safety* Video
- ❑ *An Introduction to Electric Safety*
- ❑ Additional websites and resources listed below

Directions

1. Addressing the entire class, tell them they are going to learn about outdoor electrical safety.
2. To provide a background on electric safety, select a student or students to read aloud the Safety First: An Introduction to Electric Safety primer on pages (3 and 4) of the entry kit.
3. Following the reading of the Safety First primer, play for the students the *Outdoor Electrical Safety* and *Indoor Electrical Safety* videos available on the e-SMART Kids portal.
4. Following the video, ask your students to share key safety themes they learned from the *Outdoor Electrical Safety* video.
5. Finally, have the students complete the crossword puzzle included on the activity sheet.

Answers:

ACROSS: 5) ELECTRICITY 7) ENGINEERS 8) LIGHTNING 9) POWER PLANT 13) BENJAMIN FRANKLIN 14) GET HELP

DOWN: 1) POWER LINES 2) OUTLET 3) TECHNOLOGY 4) TRANSFORMERS 6) ELECTRONS 10) SCIENCE 11) MATH 12) LIQUIDS

THIRD–FIFTH GRADE ACTIVITY

ACTIVITY 1: WORD SCRAMBLE

Test your electric safety knowledge with this word scramble.

EPROW LANTP	1. Electricity is produced at a _____ _____.
LROSA	2. Electricity can be created by harnessing energy from _____ and many other resources including wind and heat from the earth.
BUSNATIOTS	3. After being produced at a Power Plant, electricity is distributed by transmission lines to a _____.
TIRUCIC	4. All electricity travels in a closed path called a _____.
RGOUDNNIG	5. Electricity is always trying to get to the Earth. This process is called _____.
NET TEEF	6. Always remain _____ _____ away from overhead lines.

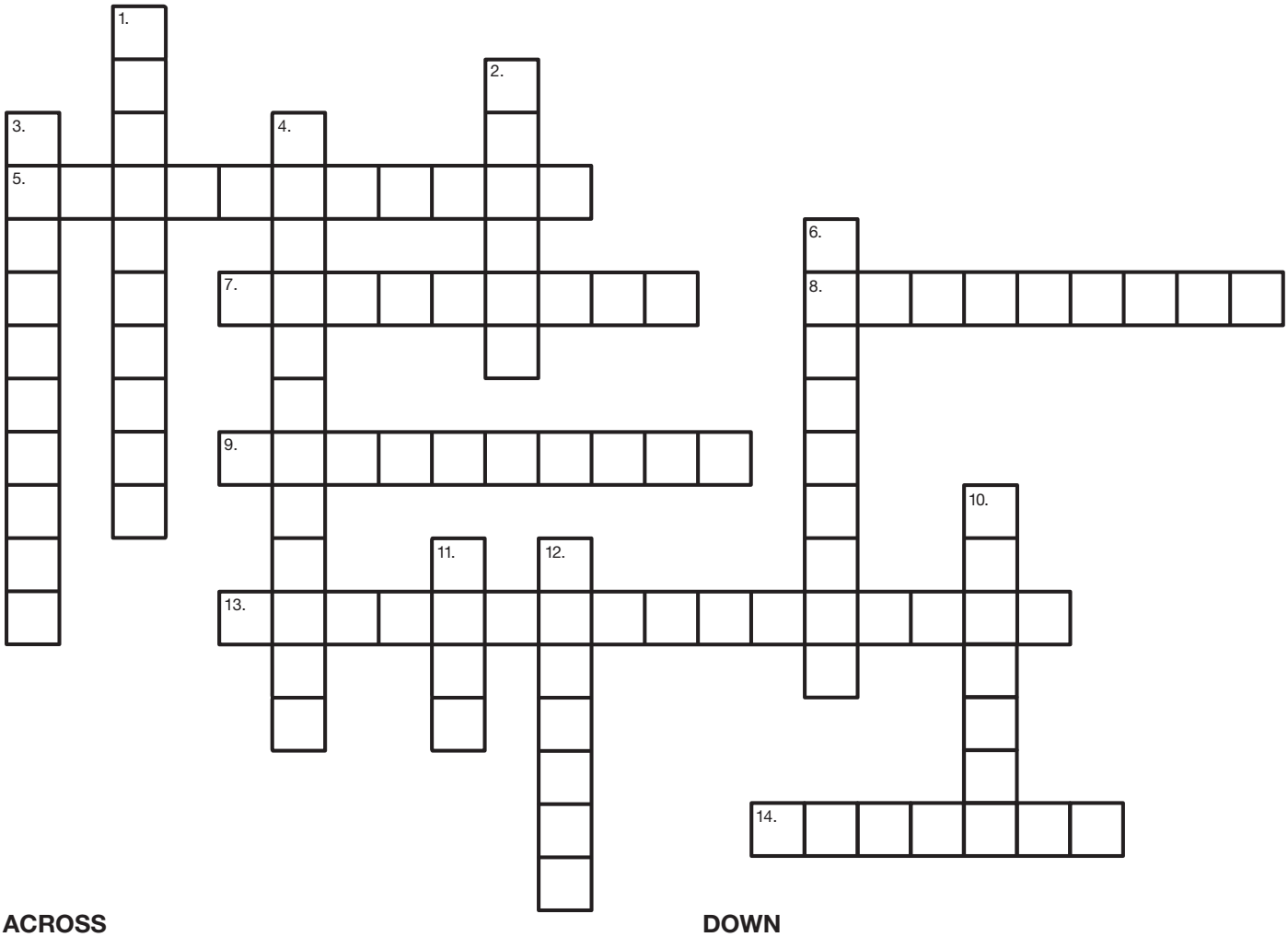
WORD BANK:

SUBSTATION	CIRCUIT
TEN FEET	SOLAR
POWER PLANT	GROUNDING

THIRD–FIFTH GRADE ACTIVITY

ACTIVITY 2 : CROSSWORD

Electric Safety 101.



ACROSS

5. _____ can be produced by harnessing the power of wind, the sun, water, underground heat, uranium and fossil fuels.

7. BGE has many _____ that design and plan how energy reaches schools and homes.

8. _____ is a large discharge of static electricity.

9. Electricity is generated in a _____ _____.

13. _____ _____ sparked interest in electric properties with his kite experiments in the mid 1700s.

14. _____ _____, and tell an adult to call BGE.

DOWN

1. Don't climb utility poles or trees that are close to _____ _____.

2. Never overload an _____ with too many plugs.

3. _____ is used to invent new devices or tools.

4. _____ reduce the high amount of electricity being sent over the power lines to the right amount of electricity for your home.

6. Atoms are made up of protons, neutrons and _____.

10. _____ is the understanding of the natural world.

11. _____ is a universal language used by scientists around the world.

12. Keep chords and appliances away from all _____.

THIRD–FIFTH GRADE ASSESSMENT

ASSESSMENT

After utilizing the plans included in this Third–Fifth Grade Lesson Plan packet, your class will have gained many takeaways about electric safety. As a final activity, work with the class to answer the assessment questions included below.

1. Where is electricity produced?
   a. Overhead electrical wires
   b. Light switch
   c. Power plant
   d. Electrical plug

2. Electricity can be produced by harnessing the energy of:
   a. Moving water
   b. Solar power
   c. Fossil fuels (natural gas, oil, or coal)
   d. All of the above

3. What should you do if you notice a downed electrical wire?
   a. Move the wire
   b. Get help, and tell an adult to call BGE
   c. Ignore the wire
   d. Play near the wire

4. You should never climb a tree if it …
   a. Has no leaves
   b. Is in direct sunlight
   c. Is in within 10 feet of an overhead electrical wire
   d. Is in a park

5. How might electricity be used safely in your home?
   a. Powering the lights in your home
   b. Keeping the food in your refrigerator chilled
   c. Heating your stove to help your parents cook
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Answers:

1) c 2) d 3) b 4) c 5) d