

Outdoor Electrical Safety Activity Book

Teacher's Guide

TEACHER NOTES

Give an example of how you have been injured because you did something that you were not supposed to do. Ask the students if they have ever received an electrical shock. Find out how each case happened and what the child learned from that “shocking” experience.

LESSON DEVELOPMENT

COVER PAGE

Discussion Points

- What are the children looking at?
- Why is Kato holding the child back?
- What does the sign on the truck in the background say?
- Why should the children not try to get the kite down?

Emphasize that the children should not climb the pole or try to pull a kite down from overhead power lines.

PAGE TWO

Discussion Points

- What are you going to learn by doing this booklet?
- What is the symbol on the left?
- Where have you seen these danger symbols before?
- Why are danger symbols used?
- What is electricity always looking for?
- Why should you avoid becoming part of electricity's path?

If you touch an object that is carrying electricity you could get a potentially fatal electric shock because electricity will try to go through your body to reach the ground.

PAGE THREE

Discussion Points

- Why is there a danger symbol drawn over the girl?
- If you were Kato what would you say to the girl?

PAGE FOUR

Discussion Points

- Where is the best place to fly kites? (*open fields away from overhead power lines*).
- What materials should be used in order to make and fly kites? (*wood, plastic or paper - never use metal parts or wire*).
- Why is it dangerous to fly kites in wet or stormy weather?

Emphasize that kites should be flown in open fields away from overhead power lines. Kites should only be flown in good weather. It is important to remind the students to make kites from safe materials. Please tell the children to fly their model airplanes away from overhead power lines too.

PAGE FIVE

Discussion Points

- What type of balloons are the children holding? (*These balloons are made of metallic material*).
- What can these balloons cause if they get into power lines? (*They can cause dangerous power outages*).

This is a good time to talk about materials that are good conductors of electricity. Remind the children that electricity is always trying to find the easiest path to the ground. To do so, it travels through conductors. Good conductors are water, metal (like copper wire) and people. People are good conductors because the human body is 60 to 70% water. That is why electricity could use your body as the easiest pathway to the ground.

PAGE SIX

Discussion Points

- Why is there a danger symbol drawn over part of the wire?
- Why is there a cover over the outlet above the wire that is plugged in? (*outdoor outlets should have weatherproof covers*).

Encourage students to remind their families that, when working outdoors they should use tools that have heavier wiring and are properly insulated. Outdoor electrical outlets should be grounded and have weatherproof covers.

PAGE SEVEN

Discussion Points

- Who uses the manual alphabet in order to communicate?
- What is written on the fence of the substation?
- Why should you stay away from substations?

Explain to the students that transformers in substations and on poles change high-voltage electricity, used for transmission, to lower levels that can be used in homes, schools, and businesses.

PAGES EIGHT AND NINE

These pages can be used to teach directions and locations. Have the children use a pencil, pen, or crayon to trace the route to the park. You can have the students make up a chart of dangers, following the example below:

LOCATION OF OUTDOOR DANGER

NW Corner of Legion Street and Bellmore Road

DESCRIPTION OF DANGER

Children climbing a utility pole

PAGE TEN

Discussion Points

- Why is Kato holding up a danger sign?
- What is the boy in the middle pointing to?
- Who do you think the person on the telephone is talking to?
- Who can you call for help when you see a downed wire?

Have the students start an emergency telephone number directory of their own. Include the number for the police, fire, ambulance, and local utility company.

PAGE ELEVEN

Discussion Points

- What is dangerous in each of the pictures?
- How would you deal with each of these situations?

Explain to students that touching a faulty appliance, plug, or bare wire can make you part of the electric circuit and cause you to be shocked. This can be very dangerous. Frayed wires and broken outlets are also very dangerous, and should not be touched or used. They should be repaired or replaced. If students notice any of these dangerous situations, they should tell an adult.

PAGE TWELVE

Discussion Points

- Why is the danger symbol drawn over the picture on the left?
- Why is the danger symbol drawn over the picture on the right?
- Can you give any other examples of how electricity and water are dangerous combinations?

Tell students to keep electrical equipment at least ten feet away from a pool or wet surface.

PAGE THIRTEEN

Discussion Points

- Why is it dangerous to fly kites in electrical storms?
- Why should you get out of the water in a storm?
- Where should you find shelter?

Stress to students that if they are outside in a storm they should seek shelter, preferably in a building. If they are out in the open they should seek low ground and stay low. They should get out of the water if they are swimming or boating. It is important to stay away from metal objects and trees as they are lightning conductors.

PAGE FOURTEEN

Discussion Points

- Why is it dangerous to fool around with electrical equipment?
- What is the purpose of warning signs on electrical equipment?

Remind your students to stay away from electrical equipment. Tell them that it is illegal to climb or attach signs to utility poles. Nails or tacks could cause the climbing spikes used by utility company personnel to slip.

PAGE FIFTEEN

Discussion Point

- Explain why each of the pictures is dangerous.

Have students make up their own scrambled messages to describe other outdoor electrical safety rules they have learned from reading this book.

PAGE SIXTEEN

Discussion Point

- What important electrical safety lessons have you learned by doing this activity book?

Have students make up safety messages using the words in the word search.

IMPORTANT: Ask students to take these booklets home and share the safety tips with their families.