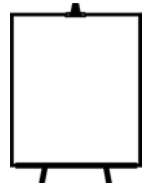


1. Electrical Hazards

Carousel Brainstorming

Resources

- Prepared chart paper - write four or more key ideas relating to electricity on top of a separate pieces of chart papers. Post chart papers at various stations around the room. Post some blank chart paper beside each prepared one. One chart per team.
- Four different coloured felt pens.



Objective

Students will generate ideas about the hazards of electricity.

Note: Electricity is a major portion of the Grade Four Science Learning Outcomes and is the area where hazards are most likely to occur when students are working with materials.

Step 1

Divide the class into 4 teams. Give each team a different colour of felt pen. Ask each team to choose a recorder. Each team goes to a chart “station”.

Allow the students two to three minutes to quickly brainstorm responses to their question or topic while the recorder writes responses on the chart paper.

Step 2

Signal teams to rotate one position clockwise, keeping their colour of felt pens with them. They should read over the responses generated by the previous group and add responses of their own.

Rotations continue until groups are back to their first chart.

1. Electrical Hazards - continued

Step 3

At their original chart, teams review the responses and identify three key points to report to the whole class.

Key Ideas for Four Charts

Chart 1: List items that you come into contact with that use electricity.

- Possible answers: television, CD player, computer, lamps, fridge, toaster, microwave

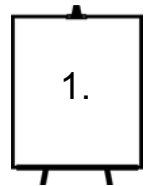


Chart 2: Name safety equipment or procedures that you would use when working with electricity or conducting experiments about electricity.

- Possible answers: goggles, gloves, wear protective clothing, turn off power before working with any appliance.

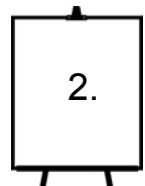


Chart 3: What are some unsafe situations where electricity is involved?

- Possible answers: overhead plugged into overhead outlet or on floor; tape recorder being plugged in on floor overnight; too many electrical appliances being plugged into one outlet.

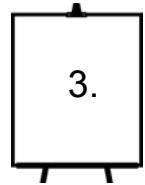


Chart 4: List First Aid measures that can be taken with injuries involving electricity.

- Possible answers: turn off power source, remove casualty from electrical source. If safe to do so; check for breathing and give Artificial Respiration if needed; check pulse; use CPR if trained; cover the entry and exit wounds with clean dry dressings; lie person down and treat for shock; obtain medical aid.



2. Preparing for P.E.



Preparing Your Class for Safe P.E. Activities

Objective

The students will discuss and practice the safe way to proceed with P.E. activities and the safe manner in which to use new equipment and skills.

Step 1

Show the class the equipment and movements you will be using in your activity. For example, you may be beginning a gymnastics unit using mats, ropes, a balance beam.

Step 2

Use the “See It, Think It, Do It” questions.

- What work are we doing?
- What injury could happen here?
- What kind of training do you need to use these tools?
- What might happen if...
 - someone used these tools incorrectly?
 - someone didn't listen to instructions?
- What can we do to make sure we are safe while we do this work?
- What do you need to know?

Students can do this work independently, in groups using the worksheet or use the overhead transparency to promote class discussion.

Step 3

Out of discussion, generate ‘**safety principles**’ to be followed during P.E. classes. Record and post in classroom or gym.

Step 4

Students role-play safe use of equipment. Audience judges if it is safe or tells what made the actions unsafe. Allow time for all students to practice safe use of equipment prior to P.E. activity. Observe and correct if necessary.



3. Hearing Protection Brainstorm

Step 1 See It!

Write 4 key ideas (see below) on separate pieces of chart paper. Post these chart papers at various stations around the room.

Key Ideas:

- **List items that you come into contact with that are loud/noisy.** E.g. stereo, concerts, lawnmower, power tools, etc.
- **List unsafe situations where noise could be a hazard.** E.g. band class, shop class, going to concerts, hunting, snowmobiling, etc.
- **Name equipment or procedures you would use when around noise to protect your hearing.** E.g. ear muffs, turn down volume, avoid.
- **List why it is important to protect your hearing.** Understand family, friends, teachers, coaches, be able to enjoy music, birds, other sounds, etc.

Divide class into 4 teams. Give each team a different colour of felt pen, ask each team to choose a recorder and a facilitator. Each team goes to a chart paper “station”.

Step 2 Think It!

Allow teams 2-3 minutes to quickly brainstorm responses to their topic/question while the recorder writes responses on the chart paper.

Signal teams to rotate one position clockwise, keeping their colour of felt pens with them. They should read over the responses generated by the previous group and add responses of their own.

Step 3 Do It!

Rotations continue until groups are back to their first chart. At their original chart, teams review the responses and identify three to four key points to repeat out to the whole class.



4. A Banana For Willy Story



A Banana for Willy

Photocopy and distribute **Student Handout #1**. Distribute the story to the class. Ask students to read and complete the story. Discuss student answers the next day per Answer Key below.

A Portable Stereo for Willy

Willy blew out his birthday candles. He wished for a new portable stereo so he could listen to his favourite music. He was so excited when he unwrapped a present and it was a portable stereo. It was from his grandpa.

The next day, Willy decided to walk to his grandpa's house. It was only 2 blocks away and he could use his new portable stereo. He loved the music as he walked. It sounded so good he turned it up really loud.

When he got to his grandpa's house, there was nobody home. Willy started walking back to his house. Suddenly he felt someone grab his arm. It was his grandpa. Willy turned the portable stereo off. "Willy, I've been calling your name", Grandpa said, "couldn't you hear me?" "I was listening to my portable stereo", said Willy.

Grandpa began to talk to Willy. "Loud sounds can damage your hearing", he said, "Even music can be too loud. When you use your portable stereo, make sure you can still hear people who are 2-3 feet away from you. If you can't, your music is too loud and could damage your hearing over time".

"Is that what happened to your hearing, Grandpa?" asked Willy. "Yes", said Grandpa, "When I started work in my noisy job we didn't know loud sounds could damage your hearing. We didn't wear hearing protection. That's why sometimes I can't hear the phone ring or hear you very well when we are talking. Now people who work in noisy jobs know they should always protect their hearing."

"I would hate for you to lose your hearing from loud noise or music." Grandpa added, "How can you protect your hearing when you are wearing your portable stereo?" Willy thought for a minute. "I could turn down the loudness," said Willy, "I could just turn it up for my favourite songs and turn the music down again after". "That sounds like a good idea," said Grandpa. "Thank-you for the portable stereo Grandpa", said Willy. "I will make sure I protect my hearing when I use it."

5. School Noise Awareness

Some areas in a school may be noisier than others (e.g. gymnasium, cafeteria, auditorium, playground).

Raise student awareness by having them tape noise levels in different parts of the school and rating them (e.g. quiet, sometimes hard to hear, always hard to hear).

Work in groups to map out findings and prepare a report.

Present findings to class.



6. Noise Thermometer Contest

Step 1 See It!

Place chart paper at various stations around the room.

Distribute Student Handout #2 to students as a sample of a thermometer.

Introduce contest: This is a Noise Thermometer.

It measures how loud or how soft a sound is in decibels, from soft sounds at the bottom to loud sounds at the top.

Decibel (dB) Definition: A way to measure loudness.

- Divide class into teams of 4-6 students.
- Give each team a marker, scissors, tape and Sound Examples:
- Each team goes to a chart paper “station”.
- Ask teams to draw a large Noise Thermometer on their Poster Paper.
- **Distribute Student Handout #3** to teams. Teams must cut the Sound Examples into strips along the dashed lines.

Step 2 Think It!

How loud do you think each sound example is in dB?

- **Clue: ordinary talking = 60 dB.**

Allow students 3-5 minutes to place the Sound Example strips where they think they should go on the Noise Thermometer. Rank by loudness from soft at the bottom to loud at the top.

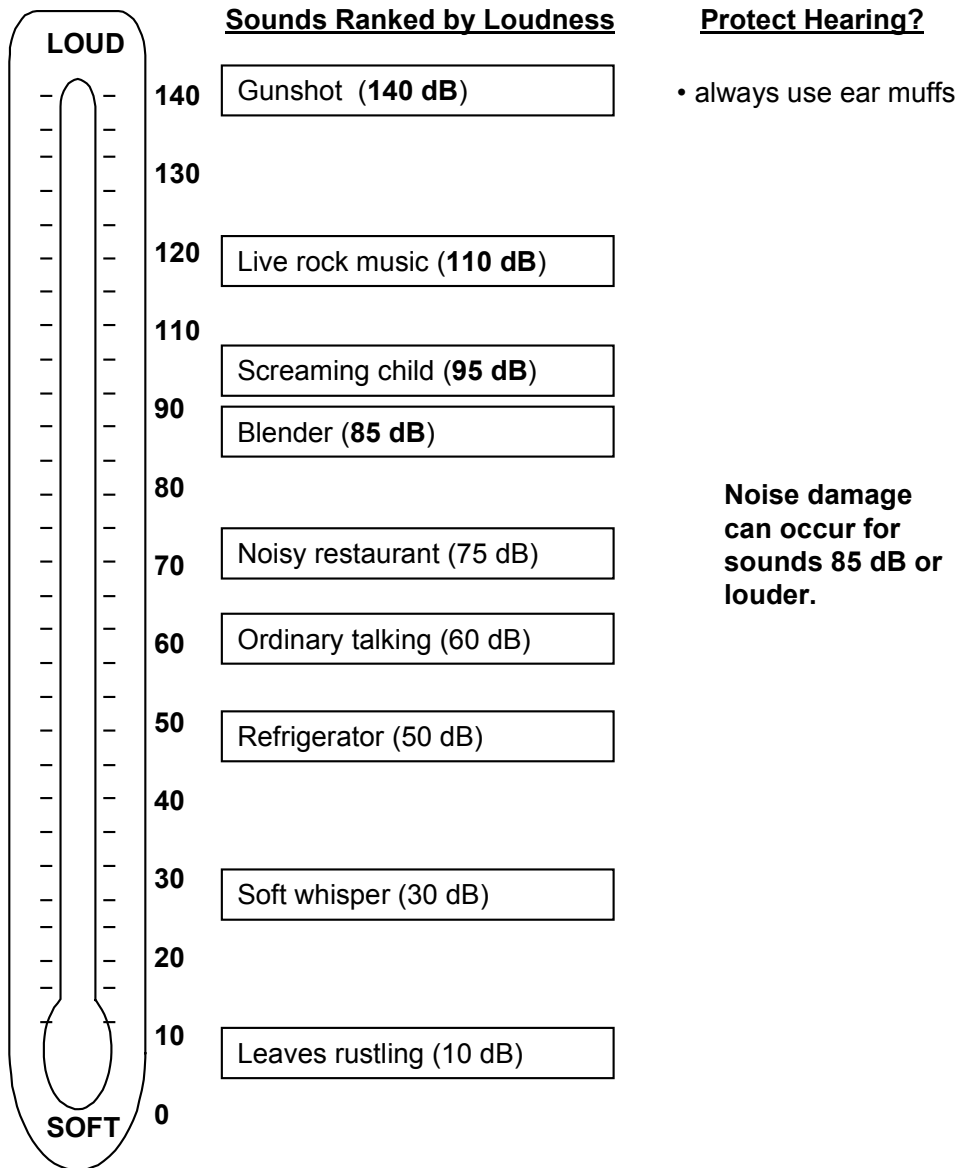
- The first group with all strips placed correctly wins the contest.
- Review team results per Answer Key.

Step 3 Do It!

Review: When is noise a hazard?

Use Rules of Thumb (from Module 2 - Student Handout #4) as a guide.

Noise Thermometer Answer Key



7. Write a Rap

Challenge students to make up a short rap song about what they have learned about hearing loss. They could include “Hear It, Think It, Do It” or words such as hazard, injury, hearing and so on.

List possible vocabulary and possible rhymes beforehand. A sample rap written by a student is provided below.

Walkman Safety Gig

**Better not listen to at level ten
Or you may not be able to hear again**

!! GONG !!

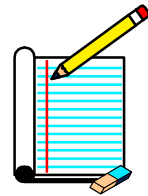
**Listen to the music really low
And if you don't, it may show**

!! GONG !!

**Even though loud music really kix
Be careful, cause your ears can't be fixed**

!! GONG !!

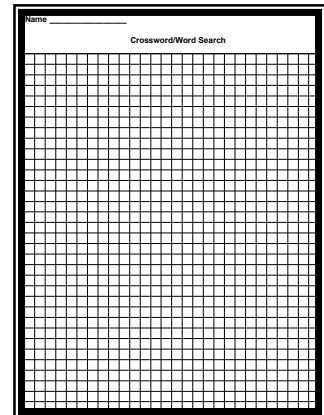
8. Personification Writing



Students choose an object that may be involved in an accident. (e.g. a marble that was tripped over, a helmet that is never worn) Students write a cartoon, children's story or paragraph from the object's point of view.

9. Hazard Recognition Puzzles

Students could create a crossword or word search puzzle using key vocabulary related to the Hazard Recognition Principles. Brainstorm possible words as a class or in groups. Write out clues. Create Crossword. Use **Student Handout #4** as grid.



10. Safety Commitment

Have students write a safety commitment for something they will do as a result of their investigation.

- Place it in an envelope. The teacher collects the envelopes and returns them in a month's time as a reminder of the commitment they made.
- Alternatively, students could record this in their journal.