## Activities: Grade 2

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Drip or Dry – Exploring Materials and Moisture

Purpose: To help students recognize appropriate clothing for various weather conditions.

Connections to You & Your World Outcomes: 2.5.1, 2.4.2

Materials Required:
• small swatches of different types of fabrics (cotton, wool, nylon, etc.) for each group
• small shallow cups or containers filled with water for each group
• copies of the “Fabulous Fabric” observation sheets (see Appendix)
• string
• paper & markers/crayons
• Stella

Teaching Strategies:
1. Begin the lesson by having Stella explain to students that while her fur is soft and pretty, it also serves a very important function as it warns other animals to stay away and protects her from the wind, rain, snow and sun. (Optional: refer to Skunk Facts on pages 11 & 12 of introduction or Welcome to the World of Skunks book for more information on skunks.)

2. Have Stella lead a discussion with students about the importance of choosing appropriate types of clothing for different kinds of weather conditions. Bring in examples of clothes OR ask students to look at the clothes they are wearing and answer the following questions:

• What are you wearing today?
• Why are you wearing these types of clothes today?
• How do the clothes that you are wearing today compare to the clothes that you will wear in warmer (or cooler) weather?
• How does our dress change with the seasons?

3. Organize students into small groups. Provide each group a container filled with water, 2 to 4 types of small fabric swatches (make sure that there is a variety of absorbent and nonabsorbent materials such as wool, fleece, nylon, cotton, acrylic, etc.), and a set of “Fabulous Fabric” observation sheets (one sheet for each type of fabric that students will observe or you may choose to have students record their observations in their journal). See Appendix for a copy of the observation sheet.

Tell students that they are going to test some fabrics to see which ones get wet the fastest, absorb the most, and dry the quickest. Show students several different types of fabrics and ask them to predict whether or not the swatch will absorb water quickly or slowly and whether or not it will dry quickly or slowly.

Next, have students drape the pieces of fabric on top of the water and observe how each type of fabric reacts in water. They should then wring out the piece of fabric and attach them to a clothesline (find two points in your classroom and attach a string between them) to observe how quickly or slowly each fabric type retains or releases water.
Have students perform the experiment and record their observations. You may also want to have students draw an illustration of their experiment findings on the back of their observation sheet or in their journal.

4. When students have completed their experiment, use Stella to engage the class in a discussion about their findings. Explain the importance of wearing clothing made from materials that are most appropriate for the weather conditions. Students should understand that some fabrics like cotton easily absorb body moisture and can keep a person’s body cool in summer, while some fabrics like wool resist moisture and provide warmth in winter.

5. Have students think of ideas for winter and summer wear (see “Recommended Winter and Summer Wear” information sheet within the Appendix). Students complete the following activity:

**Designer for a Day:** Today you are going to be a designer and create some clothes that are sassy and safe.

- **Winter:** Design a winter coat or jacket that will keep you warm and dry.
- **Summer:** Design an outfit that will keep you cool and comfortable. Be sure to include items that will also help protect you from the sun’s damaging rays.

Compile all illustrations into a class magazine entitled Sassy and Safe Wear Monthly.

**Assessment:** contribution to group discussion; following procedures during the experiment; observations recorded; effort in completion of Designer for a Day

**Extension:** See activity 2-5 and 2-7

**Appendix (follows):**
1. Fabulous Fabric Observation Sheet
2. Recommended Summer and Winter Wear
Appendix 2-1

Fabulous Fabric Observation Sheet

Date: ________________________________________

Group Members:

Describe the fabric:

Describe what happens when you put the fabric in water:

Drying Time

Draw a circle around the word that best describes how dry the fabric feels.

Very Dry       Dry in Some Places       Still Wet
Recommended Winter & Summer Wear

Winter

Winter coats and jackets should have the following design features in order to provide maximum protection against cold and wetness:

- A hood to protect the head and neck;
- A belt or string at the waste that can tighten to keep cold air out;
- Cuffs at the wrists to stop cold air from going up the sleeves;
- A zipper that can be unzipped if a person gets too warm;
- Pockets to warm a person’s hands and provide a place to put mittens;
- Flaps that cover zippers to help keep out wind and water.

Summer

Summer clothing should have the following design features in order to provide maximum comfort in hot weather:

- Fabric that is light in weight;
- Fabric that is light in color;
- Loose fitting.

Also to consider:

- Apply sunscreen 15-30 minutes before sun exposure;
- Sunscreen should be a minimum of SPF 15;
- Avoid long exposure to the sun between 11 a.m. and 4 p.m.;
- Wear a wide-brimmed hat and tightly woven clothing;
- Make sure sunglasses are UVA and UVB-resistant;
- Remember that UVB and UVA rays are always present, even on cloudy days.
Safety Through the Ages

**Purpose:** To help students understand the need for protection and safety and how these needs may change over time.

**Connections to You & Your World Outcomes:** 2.1.3, 2.4.2, 2.2.3, 2.2.1

**Materials Required:**
- two copies of "This is a Picture of me Being Safe” worksheet per student (see Appendix)
- crayons/markers

**Teaching Strategies:**
1. Begin the lesson by having Stella explain the ways in which she has learned to stay safe as she has grown. Have her “tell” students about being a baby skunk and needing the constant care and protection of her family to stay safe. As she has grown, Stella has learned to be safe by listening to adults who know about dangers and risks in her world and by observing how to avoid potentially dangerous situations. **Note:** You may wish to read aloud pages from the book *Welcome to the World of Skunks.*

2. Ask students to think about the reasons why skunk babies and human babies need protection (they are unable to feed and care for themselves, they do not know how to protect themselves from danger, they haven’t yet learned how to keep themselves safe, etc.). Next, have them brainstorm a list of ways that they were kept safe as babies by their parents or other adults.

3. Ask students to identify the ways in which they have learned to stay safe as they have grown. Ask them to consider what being healthy and safe would mean to a child (e.g. wearing a bike helmet, obeying playground rules, looking both ways before crossing the street). Next, ask them to consider what being safe would mean to an adult (e.g. obeying driving rules while operating a motor vehicle, wearing hearing protection while operating a lawnmower, using farm machinery safely etc.). Students should understand that the dangers and hazards we encounter change as we grow, but the need to recognize hazards and act responsibly to reduce the risk of injuries or illness does not.

4. Have students complete the ”This is a picture of me being safe” worksheets (see Appendix). On the first worksheet, have students draw themselves performing an activity or demonstrating a behaviour at home, school or at play that they do currently to help keep themselves safe. Ask them to write a brief description to explain their drawing. On the second worksheet, have students draw themselves as an adult performing an activity or demonstrating a behaviour at home or work that would help them to stay safe. Ask them to write a brief description to explain their drawing. Compile all pictures into a *Picture all of Us Safe* photo album or hung for a classroom display.

**Assessment:** involvement in group discussion; completed worksheets

**Extension:** Students discuss in pairs, then share as a class, how they might contribute to future change in the community.

**Appendix (follows):** “This is a picture of me being safe today” & “This is a picture of me being safe when I grow up”
Appendix 2-2

This is a picture of me being safe today

Name______________________________

I am...
This is a picture of me being safe when I grow up

Name________________________________________

I am...
Safety Around Animals

**Purpose:** To provide a review of safe procedures when around animals; review the life cycle of animals, their needs and habitats and how these might change over time.

**Connections to You & Your World Outcomes:** 2.1.1, 2.1.2, 2.1.3, 2.4.2

**Materials Required:**
- stuffed animals (have students bring one to class on the day of the lesson) OR students locate a picture of an animal of their choice
- copies of “Imperfect Pets” worksheet (see Appendix)
- crayons/markers, paper & Stella

**Teaching Strategies:**
1. Have Stella tell students that because she is a puppet, they can hold her and pet her. Ask students to consider whether or not they should attempt to hold or pet a real skunk (they should never approach a wild animal).

Distribute a sheet of paper to each student and have them fold it in half. On one side of the paper, have the students draw an animal that would be a good choice for a pet and on the other side of the paper have them draw an animal that would be a poor choice for a pet. Have Stella lead a class discussion about their choices. Ask students to complete the “Imperfect Pets” worksheet (see Appendix).

**Note:** One More Pet by Eugenie Fernandes or Great Pet Sale by Mick Inkpen would be excellent literature resources to use during this lesson.

2. Use the “Unfamiliar Animals: Stay Safe – Stay Away” information sheet (see Appendix) to help students identify strategies for staying safe around unfamiliar animals.

3. **Research:** Using their stuffed animal, a picture of an animal or another animal of their choice, students will use available literature (library) or the Internet to find out as much as they can about their particular animal to prepare for an “animal meet and greet session”. Allow each student the opportunity to share what they know/have learned about their chosen animal. For example:

- The type or animal/its name;
- The animal’s basic needs;
- Its habitat;
- Its life cycle as it compares to humans;
- How it grows, develops and changes over time;
- How to keep safe when around the animal.

The teacher may wish to begin the “animal meet and great” by presenting the information on Stella and skunks. Refer to the book Welcome to the World of Skunks or the Skunk Facts provided within the introduction section of this booklet to talk about skunks as a species of animal.
4. Have students create or draw a safe place for Stella within the classroom OR a habitat for their stuffed animal or chosen animal. Ask students to consider the various things that the animal would need to feel safe, healthy and happy in the classroom (for example, the type of shelter, climate in the classroom, companionship, exercise and play).

**Assessment:** contribution to group discussion; involvement in meet and great session; ability to identify methods of keeping safe around animals; created safe habitat

**Extension:**
1. Students draw pictures that illustrate safety rules when around animals and label their drawing: “No Petting Zoo” or “Stay Away – Stay Safe”.

2. Students draw or describe a safe habitat for humans and compare it with that of animals.

**Appendix (follows):**
1. Imperfect Pets worksheet
2. Unfamiliar Animals: Stay Safe – Stay Away
Unfamiliar Animals: Stay Safe – Stay Away

You should always avoid these situations...

Always leave stray animals alone.

Never enter an animal’s territory, not even a dog’s (that means its home, cage or yard).

Never tease an animal or use an animal to scare another person.

Always ask permission before handling someone else's pet.

Do not bother any animal when it is eating or sleeping (even your own).

Do not stick your fingers in cages where animals are kept.

Leave mother animals alone when they are with their babies.

Leave all wildlife alone.

Some wild animals look cuddly and sweet, but may bite or scratch if you touch them. They are usually afraid of humans.

A wild animal that acts friendly may be sick – and could make you sick. So to be sure, stay away.
Imperfect Pets!

Instructions: Match the animal to its name by drawing a straight line then draw a circle around the animals that would not make a good pet.

Name__________________________

Dog
Hawk
Cat
Gerbil
Parrot
Rat
Leopard
Fox

Eagle
Rat
Celebrate Safety

Purpose: To help students understand how they can contribute to creating a safe home, school and community.

Connections to You & Your World Outcomes: 2.4.2, 2.2.1

Materials Required:
• letter from Stella’s brother (see Appendix)
• one copy of the student letter template for each student (see Appendix)
• Stella & Stop, Think, Do poster (part of program kit)

Teaching Strategies:
1. Place the letter from Stella’s brother (see Appendix) in an envelope and have the letter on or near Stella prior to class. During class, have Stella explain to students that she is very excited because she has just received a letter from her brother and she can’t wait to hear how he is.

2. Read the letter to students, then lead a discussion about some of the safety issues discussed in the letter. Have students brainstorm some of the dangers associated in our daily activities. Create a class list of dangers that exist at school, at home and within the community. Request student input for strategies and suggestions for avoiding the dangers they have listed.

4. Review the Stop, Think, Do poster and how these three actions can help protect our safety. Link our personal responsibilities in contributing to a safe environment.

5. Ask students to help Stella write a letter back to her brother (they can write the letter on decorative skunk paper provided in the Appendix). Have Stella explain that she wants to tell her brother all about how her new school pals (the students) contribute to making the school, their home and the community a safe place to live, work and grow. Encourage students to draw a picture to compliment their letter.

Assessment: participation in class discussion; effort and content of created letter

Extension: In groups, students create a list of all the people within the community that can help if they feel unsafe or are in danger.

Appendix (follows):
1. Letter from Stella’s brother
2. skunk letter template
Dear Stella,

I miss you lots!

I have done lots of fun things this summer. I dug up grubs. I wandered through people’s yards. I even had pizza one night at the neighbor’s house. There was really good garbage to eat this summer. Yum!

Mom is making sure that I stay safe. I wanted to go swimming alone. Mom said no because children should always swim with an adult. I wanted to walk into town with some friends at night. Mom said no because there is a lot of traffic and I could get hurt.

I try to listen to Mom and do what she tells me so that I will stay safe. I am trying hard to stop and think before I do something that could hurt me. I can’t wait to see you again. I hope that you are safe and happy with your class. Now, it’s your turn to write!

Your brother,
Sam

P.S. Mom made me write this letter.
On Thin Ice

Purpose: To provide students with an introduction to the three states of water and their link to ice safety.

Connections to You & Your World Outcomes: 2.5.2, 2.4.2, 2.5.1, 2.2.1

Materials Required:
• instructions for “The Amazing States of Water Game” (see Appendix)
• “Don’t Get Caught on Thin Ice” (see Appendix) & Stella
• “Ice Safety: Self-Rescue Steps” (see Appendix)

Teaching Strategies:
1. Begin the lesson by having Stella lead a discussion with students about ice safety in winter. Have her explain that when she’s in the wild she doesn’t do very much in the winter because the weather conditions often keep her in her den. Have Stella tell students that it makes her happy to think about all the fun things that children can do in winter like building snowmen, sledding and skating outdoors. Next, have her tell students that sometimes she gets sad because she knows that children can also get seriously hurt in winter, especially when they play or skate on thin ice.

Note: Refer to the book Welcome to the World of Skunks or the Skunk Facts within the introduction section (pages 11 & 12) for information on skunks and hibernation.

2. Students should be aware that there are three states of water. Have students participate in a movement game to illustrate these states (see “The Amazing States of Water Game” within the Appendix).

   Explain that water is made up of very tiny specks that we cannot see and how these specks act determines whether they will form a solid, liquid, or vapor. Have Stella inform students that they are going to pretend to be these tiny specks and they will act like the specks in order to change into ice, water, and vapor.

3. Upon completion of “The Amazing States of Water Game”, make the connection between the changing states of water and importance of ice safety. Ask students to tell what they know about ice. Use the “Don’t Get Caught on Thin Ice” and the “Ice Safety: Self Rescue Steps” information sheets (see Appendix) to review strategies for staying safe on the ice. Link the discussion to listening to your inner voice when determining the level of danger/risk.

4. Have students role-play several winter activity related scenarios including a scenario that demonstrates what they would do if a friend were to fall through the ice.

Assessment: participation in game and role-plays

Extension:
1. Students list or draw a picture that would represent proper clothing and protective equipment to wear when skating or during other winter activities.
2. See **Appendix** (Cozy and Chilly Cubes) for an additional experiment that explores the states of water.

3. See activities 2-1 and 2-7

**Appendix (follows):**
1. The Amazing Sates of Water Game
2. Don’t Get Caught on Thin Ice
3. Ice Safety: Self-Rescue Steps
4. Cozy and Chilly Cubes experiment

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**Appendix 2-5**

**The Amazing States of Water Game**

**Instructions**

1. Let students know that they will use the same amount of space to do the 3 activities.

2. Create the shape of an open container on the floor. This may be done by arranging desks to form the container on the floor or with masking tape.

3. Play the “Amazing States of Water” game by having students move in the following ways:

**Solid Ice**

Tell students that they will first be ice and that you will tell them to “begin” when it’s time to start. Ask students to identify what water needs to turn to ice (cold). Ask students to pretend that they are water specks in a freezer. Have them stretch their arms out stiff with their arms moving outward to form a V shape (like a real molecule). Inform students that they are going to move like tiny specks of ice. Explain to students that cold makes us move very very slowly. We want to be near one another, but we’re so cold that we can barely move. When we touch another speck of ice, we’ll stop and leave a space between us. “Begin”

**Liquid Ice**

Tell students that they are now going to be liquid water specks. Tell students to wait until you say it is time to begin, and then see if students can act out liquid water specks. Have students move like liquid water. Tell students that liquid water specks want to be near each other. However, they move pretty fast and it’s not always easy to stay close to one another. Say, “let’s put our hand on our neighbor’s shoulder and move quickly from side to side”. Remember we need to stay very near our neighbor and stay inside our container just like water does. “Begin”. Next ask if it was hard to stay close to another when you were moving so fast? Did you still have a space between you and the other water specks?
**Water Vapor**
Ask students what is needed to change water into vapor (heat). Tell students that heat gives water a lot of energy and makes it very active. It becomes so active that it starts bouncing and jumping all over the place. Tell students that they are now going to act like specks of water vapor. They are to stay in the same area and jump on the spot. Next, ask students if it was hard to try to be so active in this space. Did they end up jumping right out of this space? Specks of water vapor don’t like to be too close to one another because they need lots of room to jump and bounce.

Once the game has been played, have students describe how the water (i.e. the students represented the water) looked during its different stages and with different amounts of energy. You may wish to draw their description on the board.

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**Don’t Get Caught on Thin Ice!**

**Rule #1**
Always check with a responsible adult before walking/skating on or near the ice.

**Rule #2**
Only play on or near the ice when a responsible adult is supervising and obey all signs posted in or near the ice.

**Rule #3**
Use the buddy system - never walk on ice when you are alone.

**Rule #4**
Avoid walking on ice that is on or near moving water.

**Rule #5**
If you hear the ice crack, lay down on the ice and crawl or roll back to land. Call for help loudly and clearly if you are in trouble.

**Important Ice Facts**

Ice should be at least 10 centimeter (4 inches) thick before doing any outdoor activities.

It is hard to know exactly how thick ice is; ice formed on moving water, such as rivers and creeks, varies in thickness.

In spring weather, thick ice is not necessarily safe. During the spring melt lines of impurities in the ice melt very quickly and create weak spots.

Ice seldom freezes or thaws at an equal rate.

**Remember, if your safety is in doubt, don’t go out!**
Ice Safety: Self-Rescue Steps

If you go through the ice, follow these self-rescue steps:

• Float on your stomach facing the shore.
• Slowly reach forward onto the ice - do not push down on it.
• Kick your legs to slowly push your torso (the upper part of your body) onto the ice.
• If you can’t climb onto the ice, float in the water and call for help loudly and clearly.
• Once back up onto the ice, crawl or roll away from the hole.
• Get medical help immediately.

Rescuing Another Person

A rescue attempt can result in two victims instead of one. Instead of attempting to pull someone who has fallen through the ice out yourself, help them to rescue themselves by...

• Phoning 911 for help;
• Calling out the self-rescue steps (listed above) to the victim;
• Pushing or throwing something (like a long stick, a branch, a rope or a floating aid) to the victim. Encourage the person who has fallen through the ice to use this to help themselves get out of the water or to float until expert help arrives.

REMEMBER, reach or throw, but don’t go!
Appendix 2-5

Cozy and Chilly Cubes

Materials Required:
• newspaper
• towels & foil
• mittens or scarves
• 2 ice cubes and two zip-loc sandwich bags for each group
• sugar cubes, cardboard blocks or paper plates and glue (optional)

Teaching Strategies:
1. Have Stella explain to students that when we are not protected adequately against cold and wet conditions, our bodies lose heat rapidly and our body temperature becomes unstable. As a result, we can become very sick (hypothermia).

2. Students should be aware that some materials prevent heat from moving from one place to another while other materials increase the speed of heat moving from one place to another. Tell students that they are going to do two separate experiments to find out more about heat and cold.

3. For the first experiment, organize students into groups of 2 or 4 and encourage them to think of conditions that would make ice melt. Give each group an ice cube, in a zip-loc bag. Next, have all groups begin the experiment at the same time. Together students should think of ways to help the ice cube melt quickly. Have students use the “Cozy Cubes” student observation sheet to record their observations (follows).

4. Remind students that their ice cube must stay in the plastic bag at all times. Have the groups discuss what they can do to help the cube melt (for example, they may choose to take turns patting, rubbing or shaking the ice cube). Have each student take a turn trying something that will help the ice to melt. Discuss why the ice cube melted and how long it took to melt.

5. Prior to starting the second experiment, review the findings of the previous experiment. For the second experiment, organize students into their groups. Indicate that they are going to attempt to prevent their ice cube from melting. Encourage students to think of conditions that would prevent ice from melting. Tell them that they should use what they learned about how ice melts to help them keep the ice in this experiment from melting.

6. Remind students that their ice cube must stay in the plastic bag at all times. Give each group an ice cube in a zip-loc bag and a variety of materials that will assist them in preventing their ice cube from melting (e.g. foil, newspaper, fabric). Next, have all groups begin the experiment at the same time. Together students should think of ways to prevent the ice cube from melting quickly. Have students use the “Chilly Cubes” student observation sheet to record their observations (follows). At a designated time, have each group unwrap the ice cube and share what they did to try and keep the ice from melting. The group with the largest ice cube will explain why they think theirs lasted the longest.
7. Make connections between the results of their investigation and ice safety. You could also make connections between the results of their investigations and the types of clothes that we wear during the different seasons to stay warm or cool.

8. **Optional**: Have students create an ice safety sculpture that includes an ice safety message. Have students glue sugar cubes to painted cardboard blocks or large paper plates to construct a sculpture (an igloo, ice castle, etc.). For a whimsical touch, have students add glitter or touches of metallic paint to their creation. Have students write a tip for staying safe on ice below their sculpture.
Cosy Cubes Observation Sheet

Group
Members

We think the fastest way to make the ice cube melt will be

This is what we did to make it melt
Chilly Cubes Observation Sheet

Group Members

We think the best way to prevent our ice cube from melting is

This is what we did to keep it from melting

At the end of the experiment, our ice cube looked like
Use Your Head – Wear A Helmet

Purpose: To help students understand the benefits of wearing a bike helmet.

Connections to You & Your World Outcomes: 2.4.2, 2.2.1, 2.4.1 (see Extension)

Materials Required:
• a raw egg
• a clear plastic bag
• duct tape & Stella
• a bike helmet
• “Use Your Head – Use Your Helmet” information sheet (see Appendix)
• “Use Your Head – Use Your Helmet” worksheet (see Appendix)
• drawing paper, crayons or markers
• request students bring in their bike helmet for this lesson (optional)

Teaching Strategies:
1. Lead a discussion with students regarding the use of bike helmets. Ask students to brainstorm a list of times when they should wear a helmet (e.g. snowmobiling, skating, in-line skating, ATV, downhill skiing).

2. Ask students to think of some possible excuses for not wearing a helmet (e.g. I’m a safe biker, I never do stunts, I don’t ride on busy streets, they look stupid etc.).

3. Ask students to identify why it is important to always wear their helmets. Students should understand that the head contains the brain, which is the control centre for the body. The brain controls all of the body’s functions and even though it is strong, it can become damaged if it is in contact with something harder, such as cement or rock.

4. Hold up the egg and ask students to compare it to a person’s head (the shell is similar to the skull and the inside of the egg is similar to the brain). Explain that people who cycle without a bicycle helmet can fracture their skulls or seriously damage their brain. Explain to students that like an egg, a crack to their head could leave their brain scrambled.

5. Wrap an egg in a clear plastic bag and use duct tape to attach it to the inside of a bike helmet. Ask students to predict what they think will happen to the egg if you drop it when it is taped to the helmet. Drop the helmet from shoulder height onto a hard flat surface (the top of the helmet is facing down). The egg should not break. Then, take the egg out of the bike helmet (leave it inside the clear plastic bag) and ask students to predict what they think will happen if you drop it from the same height. The egg will break (the plastic bag will keep it contained).

Note: Complete instructions for this demonstration can be found within the Appendix. It is suggested that the teacher attempts the experiment prior to the demonstration to ensure that the surface is hard enough to break the egg.
6. After the demonstration, ask students the following questions:
   • Why do you think the egg did not break when it was taped to the helmet?
   • What does this tell you about bike helmets?

Reinforce the idea with students that the brain is not like a person’s skin and bones, which can usually heal easily. When a person’s brain is severely damaged, it is not likely that it will ever return to normal. Helmets cushion the head and can prevent injury. When a bike helmet hits something hard, the outer shell spreads the force of the bump through the entire helmet. The styrofoam cushions the skull and absorbs the shock of falls.

7. Next, demonstrate how to wear a helmet properly. Ask for a volunteer who has brought their helmet to school. Demonstrate proper wear and fit of the helmet on the student. If other students have their helmet, ask them to practice putting it on as you circulate to ensure correct fit and wear. For the students without a helmet, they can make observations and suggestions to the others.

Use the “Use Your Head – Use Your Helmet” information sheet (see Appendix) to help students understand the proper way to wear a bike helmet. Once you have completed the demonstration, have students complete the “Use Your Helmet – Use Your Head” worksheet (see Appendix).

8. Have students design posters that advocate the proper use of bike helmets to protect against head injury. Tell students that their posters should illustrate a reason for wearing helmets. Students “go on tour” to present their posters to other students and the important message of bike helmet use (optional).

OR Students brainstorm how they can help others choose to wear bike helmets. Perhaps have students create table topers that promote bike helmets and place them around the school or community. Or students submit an article to the paper or write an announcement to be used at the school, to inform others of the importance of wearing a helmet when biking and/or during other activities.

Assessment: completion of worksheet, content and creativity in poster design

Extension:
1. Link physical activity as a healthy lifestyle choice and use of appropriate personal protective equipment and clothing when performing physical activity as a safe lifestyle choice.
2. Review bike safety rules (see Be Smart, Bike Safely in Appendix)
3. Bike Safety Tic-Tac-Toe (see instructions and Q&A within the Appendix)

Appendix (follows):
1. Incredible Egg Drop Demonstration
2. Gear up for Safety: Use your Helmet
3. Gear up for Safety Student Worksheet
4. Be Smart, Bike Safely
5. Bike Safety Tic-Tac-Toe Instructions
6. Bike Safety Tic-Tac-Toe Suggested Questions and Answers
7. Hand signals
8. Choosing & Using the Correct Helmet (suggestion: sent home for parent/guardian)
Incredible Egg Drop Demonstration

Teacher Instructions

1. Hold up the egg and ask students to compare it to their own heads (the shell of an egg is similar to the skull and the inside of the egg is similar to the brain).
2. Ask students to explain what could happen to people who cycle without a bicycle helmet (they can fracture their skulls or seriously damage their brain). Explain to students that like an egg, a crack to their head could leave their brain scrambled.
3. Wrap an egg in a clear plastic bag and use duct tape to attach it to the inside of a bike helmet.
4. Ask students to predict what they think will happen to the egg if you drop it when it is taped to the helmet. Drop the helmet from shoulder height (so the top of the helmet is facing down) onto a hard flat surface (the egg should not break).
5. Take the egg out of the bike helmet (leave it inside the clear plastic bag) and ask students to predict what they think will happen when you drop it from the same height (the egg will break, but the plastic bag will keep it contained).

Note: Try this experiment prior to the demonstration to ensure that the surface is hard enough to break the egg.
Appendix 2-6

Gear Up for Safety: Use Your Helmet

**Does it fit?**
To be safe, helmets need to fit and be worn properly. A helmet should be level across the forehead. There should be two finger widths between the eyebrows and the helmet. The helmet should fit snug and level. It should not move forward, backward or come off.

**Does it slide off?**
Try to slide the helmet off. If it does not come off with a good tug, then it should not come off in an accident.

**Have you adjusted your straps?**
The side buckles should meet below the ears, making a “V” shape under each ear lobe.

**Is your strap snug?**
The chinstrap should be fastened snugly. The gap between your chin and the chinstrap should be no more than one finger width. The helmet should not be so tight that it hurts and it should not tilt backward or slide down over your eyes.

**Do you need extra padding?**
There are foam pads that come with the helmet which can be placed in the helmet to make sure it fits properly.

**Are you wearing bright colors?**
Bright colors are best when choosing both clothing and a helmet. The colors yellow or white are especially good choices because drivers can see you clearly from a distance.

**How old is your helmet?**
When your helmet is five years old, replace it. It may look okay, but there may be damage you cannot see. It won’t protect you in a fall. Be sure to keep your helmet in dry area free from items that can crush or damage it.

**Has your helmet been hurt?**
Your helmet is good for one fall. If it has been in a crash, replace it. Helmets are disposable; heads are not.

**Is it the right helmet for the ride?**
Check the inside of the helmet to make sure the helmet has a sticker of approval from either CSA (Canadian Standards Association), ANSI (American National Standards Institute) or the SNELL Memorial Foundation. Do not use hockey, football or other sports helmets when biking. They are not designed to protect your head in a bike accident.
# Gear Up for Safety Student Worksheet

Name: ______________________________

Place a happy face in the boxes below that are the correct ways to wear your helmet.

Place a sad face in the boxes that are the incorrect ways to wear a helmet.

<table>
<thead>
<tr>
<th>Correct Ways</th>
<th>Incorrect Ways</th>
</tr>
</thead>
<tbody>
<tr>
<td>The helmet is snug on your head</td>
<td>Your helmet sits two finger-widths above your eyebrows</td>
</tr>
<tr>
<td>The straps lie flat and make a “V” under each ear</td>
<td>You wear your helmet tipped back so you look good</td>
</tr>
<tr>
<td>You are wearing a hockey helmet to bike</td>
<td>Your snaps are loosely fastened</td>
</tr>
<tr>
<td>Your chinstrap is snug, but it doesn’t hurt</td>
<td>Your helmet has an approved safety sticker</td>
</tr>
</tbody>
</table>
Be Smart, Bike Safely

OBEY all signs and signals

WALK your bike across the street

CROSS the street at the corner or designated locations (i.e. crosswalks)

STOP and LOOK left, right and left again before entering traffic (roadways, driveways, sidewalks, alleys or parking lots)

STAY on the right-hand side of the road, and ride in the same direction as traffic

ALWAYS ride single file

ALWAYS use your hand signals

NEVER “double” your friends or hang on to moving vehicles

WEAR bright clothing and reflective gear to help cars see you

AVOID riding your bike in bad weather or after dark

KEEP your bike in good repair

SLOW down on unfamiliar roads

Bike Safety Tic-Tac-Toe

Teacher Instructions

1. Draw a Tic-Tac-Toe diagram on the chalkboard inserting numbers 1-9 in the boxes.
2. Divide students into two teams - the X’s and the O’s.
3. Decide which team goes first and line up each team in a single file.
4. The first person in line of the first team chooses a box.
5. Ask the first group a question (question and answer sheet follows). If the group is correct then their team symbol is placed in the box. If the answer is incorrect, the opposing team has the opportunity to answer the question and insert their own symbol in that box.
6. Continue playing the game with the first person in line of the other team choosing a box and their team responding to a question.
7. The winning team is the one that has three consecutive symbols in the diagram (i.e., XXX or OOO).
Bike Safety Tic-Tac-Toe

**Suggested Questions and Answers**

1. **What should you wear every time you cycle?**  
   A bike helmet

2. **What rules should you obey every time you ride?**  
   The rules of the road (provide an example)

3. **When you want to cross the street, from what location should you cross the street?**  
   You should cross the street at the corner or designated locations/crosswalks

4. **What should you do with your bike when you want to cross the street?**  
   You should walk your bike across the street

5. **When is it unsafe to ride your bike?**  
   You should never ride your bike after dark or in bad weather

6. **What should you always do when entering traffic (roadways, driveways, sidewalks, alleys or parking lots)?**  
   Stop, look left, right and left again before entering traffic

7. **When riding a bike, should you ride in double or single file?**  
   You should always ride single file

8. **On what side of the road must you ride?**  
   The right hand side off the road (ride in the same direction as traffic)

9. **What is the hand signal for a right turn?**  
   Left arm out and hand up like your saying “Hi”

10. **What is the hand signal for a left turn?**  
    Left arm straight out

11. **What is the hand signal for a stop?**  
    Left arm out, hand down at your side

12. **What should you do at a stop sign?**  
    Stop, look all ways and listen - when it is clear, go

13. **What color of clothing should you wear when biking?**  
    Bright colors (they should also be reflective if possible)
14. What must your bike have so that you can warn others that you are approaching? A bell or horn

15. Why should you wear a helmet? To protect your head and brain

16. Who needs to wear a helmet while cycling? Everyone

17. Is it safe for two people to ride on one bike? No – passengers are not allowed on a bike designed for one person

18. Besides cyclists, which other professional athletes wear helmets while participating in sports? Hockey players, football players, baseball players

19. What should you do when you get to a traffic light and it turns yellow? Stop

20. Can a hockey helmet be used for biking? No - a bicycle helmet is for biking, a hockey helmet is for hockey

21. If your helmet has been in a crash or you don’t see any cracks, it is still okay to use. True or false? False - if it has been in a crash, you need to get a new helmet

22. During which other activities should a helmet be worn? Snowmobiling, skating, down hill skiing, in-line skating, ATV, motorcycle etc.
Hand Signals

Right Hand Signal
Left arm out and hand up like you’re saying "Hi"

Left Hand Signal
Left arm straight out

Stop Signal
Left arm out, hand down at your side
Choosing & Using the Correct Helmet

Wearing a helmet while bicycling is like wearing a seat belt while driving—a necessity. Helmets reduce the risk of head injury in children and adults, and are recommended for many other recreational activities. Helmets are not just an injury prevention tool, but they also provide a sense of security and protection. Some helmets, such as bicycle helmets, are designed to protect the head from a single impact, while others are designed to protect the head from multiple impacts. Choosing the right helmet depends on the activity in which you are participating.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Recommended Helmet</th>
<th>Certification</th>
<th>Type of Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycling</td>
<td>Bicycle helmet</td>
<td>CSA, CPSC, Snell SB-95, N-94, certified</td>
<td>Single impact</td>
</tr>
<tr>
<td>Inline Skating</td>
<td>Roll-off the skater helmet</td>
<td>CSA, ASTM F-1043-1994, Snell PS-91 certified</td>
<td>Single, Multiple impact</td>
</tr>
<tr>
<td>Snowboarding</td>
<td>Snowboarding helmet</td>
<td>ASTM F-1043-1994, Snell PS-91, certified</td>
<td>Single, Multiple impact</td>
</tr>
<tr>
<td>Scooter</td>
<td>Bicycle helmet</td>
<td>CSA, CPSC, Snell PS-91, certified</td>
<td>Single impact</td>
</tr>
<tr>
<td>Alpine Skiing</td>
<td>Alpine skiing helmet</td>
<td>CEN, Snell RS-98, S-100, ASTM F-2001 certified</td>
<td>Single impact</td>
</tr>
<tr>
<td>Snowmobiling</td>
<td>Alpine skiing helmet</td>
<td>CEN, Snell RS-98, S-100, ASTM F-2001 certified</td>
<td>Single impact</td>
</tr>
<tr>
<td>Tobogganing</td>
<td>Alpine skiing helmet</td>
<td>CEN, Snell RS-98, S-100, ASTM F-2001 certified</td>
<td>Single, Multiple impact</td>
</tr>
<tr>
<td>Ice Skating</td>
<td>Ice skating helmet</td>
<td>CSA certified</td>
<td>Multiple impact</td>
</tr>
<tr>
<td>Horseback Riding</td>
<td>Horseback riding helmet</td>
<td>CSA certified</td>
<td>Multiple impact</td>
</tr>
</tbody>
</table>

REMEMBER
- Children's heads grow, change shape, and develop differently as they grow. A helmet that fits well needs to be adjusted and replaced as needed.
- Make sure your helmet has a chin strap that fits snugly under the jaw and is easy to attach and release.
- Never wear a helmet that has been in a crash. If you can turn any damage, the protective capacity of the helmet may be reduced.

TIPS
- A helmet must fit correctly when:
  - It sits squarely on the head with the bottom edge of the helmet at or below the brow line of the eye.
  - The straps are adjusted so there is no slack or overlap of the strap.
  - The helmet is not tilted to the right or left.
- Properly fit helmet by:
  - The helmet should not be loose or too tight.
  - The helmet should be worn with the strap under the jaw and not over the ears.
  - The helmet should be replaced if it is damaged.

For more information on helmet use and safety, contact Ottawa Public Health at (613) 580-6744.
Don’t Get Bitten – Preventing Frostbite

**Purpose:** To help students understand the importance of dressing appropriately for winter conditions.

**Connections to You & Your World Outcomes:** 2.4.1, 2.4.2, 2.5.1, 2.5.2

**Materials Required:**
- 1 fresh banana and 1 frozen banana
- “Don’t get Bitten by Frostbite” teacher information sheet (see Appendix)
- old catalogues and magazines
- scissors, tape or glue & Stella
- “Chilly Charlie” cutout (see Appendix)

**Teaching Strategies:**
1. Begin the lesson by having Stella tell students about some of her winter routines and/or read aloud pages from the book *Welcome to the World of Skunks*. Next, ask students whether or not their parents ever “nag” them about leaving the house without wearing all of their winter clothing (i.e. hats, scarves, mittens, snow suits, hooded jackets that are zippered all the way up, etc.) Ask students to explain why it is important to wear appropriate clothing in winter.

**Note:** *Thomas’ Snowsuit* and *50 Below Zero* by Robert Munsch, *The Big Storm* by Rhea Tregebov, and *Belle’s Journey* by Marilyn Raynolds would be excellent literature resources to use during this lesson.

2. Perform a demonstration to help students understand the effects of frostbite. Ask students to describe how food looks and feels when it is frozen. Next, show students a fresh banana and ask them to predict what the banana would look like and feel like it were frozen and then thawed out. Show students the frozen banana and ask them to think about what happens to our skin when it is exposed to freezing temperatures and frigid wind.

3. Have students draw comparisons between what happened to the banana when it was frozen and what happens to our skin when it is exposed to freezing temperatures and frigid wind. Ask students whether or not they have ever lost feeling in their cheeks, hands, ears, etc. while playing outside in winter.

**Note:** When a banana freezes, the freezing temperatures result in moisture loss causing the skin of the banana to change color and become dry and tough. Freezing causes the cell walls inside the banana to rupture and turns the inside of the banana to mush.

4. Use the “Don’t get Bitten by Frostbite” teacher information sheet (see Appendix) to teach students about the effects of frostbite and strategies for preventing it. Discuss clothing as a basic need of humans. Request student input in what they should do if they or a friend was suffering from frostbite/ extreme cold.
5. Distribute a copy of the “Chilly Charlie” cutout (see Appendix) to students. Ask students to find pictures of appropriate winter clothing in old catalogues and/or magazines. Have students cut and paste the pictures they have selected onto their Chilly Charlie handout so that he will be outfitted adequately for freezing winter weather conditions.

Students should be reminded of the importance of wearing layers of clothing as well as hats, scarves, mittens, boots, etc. to prevent body parts from being exposed to the elements.

**Assessment:** involvement in discussion; request each student share their Chilly Charlie to determine if appropriate clothing was chosen

**Extension:** See activities 2-1 and 2-5

**Appendix (follows):**
1. Don’t Get Bitten by Frostbite
2. Chili Charlie cutout

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**Appendix 2-7**

**Don’t Get Bitten by Frostbite**

**Frostbite Facts**
- Frostbite is, literally, frozen body tissue. It occurs as a result of damage to body tissues (such as our skin) from exposure to extreme cold.
- Frostbite can affect any area of the body that is not adequately protected against the cold.
- Common areas for frostbite are the nose, fingers, toes or ears.
- The risk for frostbite is greatest at times when there is a high wind-chill factor (wind plus freezing temperatures).

**Symptoms of Frostbite**
- Early symptoms of frostbite include pain, burning or “pins and needles” sensation.
- Later symptoms of frostbite include numbness when skin in the affected area is pressed. Furthermore, the underlying tissues may feel hard.
- There is a discoloration of the skin. It usually becomes gray, bluish or a waxy white.
- In severe frostbite, the skin may be a pale, waxy yellow color or become red and swollen. Furthermore, blisters may develop.

**Prevention of Frostbite**
- Be prepared for changes in situation or weather conditions.
- Wear layered, windproof and waterproof clothing.
- Keep as much skin as possible covered when out in the cold, especially if it is windy as well.
- When playing or working outdoors in winter, go indoors at regular intervals.
- Hands should be kept in pockets or under arms to keep them warm if a person gets caught without gloves/mittens.
- Gloves/mittens and a hat should be kept in the pockets of coats that are worn regularly so that they are less likely to be forgotten.
Chilly Charlie Cutout
Gearing up for Safety

**Purpose:** To help students understand the importance of using personal protective equipment/clothing for leisure and for work.

**Connections to You & Your World Outcomes:** 2.4.2, 2.4.1

**Materials Required:**
- copies of student activity sheets (see Appendix for a number to choose from)
- paper, markers/crayons
- Stella

**Teaching Strategies:**
1. Introduce the activity by having Stella remind students that her striped fur and her unique scent help to protect her against predators. Have Stella tell students that personal protective equipment is any object or material that we use to help reduce our risk of injury while doing any activity that could endanger our health and safety.

   Have students create a list of protective clothing and/or other gear that people use to avoid injury when doing various sports/activities. Next, brainstorm ideas about the types of jobs that would require personal protective equipment. Record all responses on the blackboard.

2. Ask students the following questions:
   - Why is wearing the right protective equipment so important?
   - Why is it important for people to wear the right gear for the particular activity in which they are participating?
   - What can happen to people who don't wear the right protective equipment while engaging in potentially dangerous activities?

3. Individually or in small groups, students complete any number of the activity sheets found within the Appendix. Review their answers aloud.

4. Explain to students that their task is to design a “cool” protective equipment/clothing to create a class catalogue. Each group (or individually) must design and draw the protective equipment/clothing, write a brief description of the article and the way in which it can help protect us. They must also determine a monetary value for the item to be sold in the catalogue. Once all groups have completed their catalogue page, create a class catalogue entitled *Get The Gear: Cool Safety Equipment Catalogue.*

5. For homework, have students create a list of protective equipment/clothing that can be found around the home.

**Assessment:** participation in discussion; effort in design of protective equipment; homework assignment; activity sheets

**Extension:** See Appendix for a variety of activity sheets that students can be assigned.
Appendix (follows):
1. Get the Gear When you go to Work
2. Gearing up for Safety
3. Mix & Match activity sheet
# Get the Gear When You Go to Work!

There are many different types of jobs that require the use of personal protective equipment (PPE). Discuss what type of PPE each job below should wear.

<table>
<thead>
<tr>
<th>Nurse</th>
<th>Police Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>Lawn Mower</td>
</tr>
<tr>
<td>Scientist</td>
<td>Electrician</td>
</tr>
<tr>
<td>Farmer</td>
<td>Plumber</td>
</tr>
<tr>
<td>Painter</td>
<td>Gardener</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>Carpenter</td>
</tr>
<tr>
<td>Fire Fighter</td>
<td>Welder</td>
</tr>
<tr>
<td>Mechanic</td>
<td>Dentist</td>
</tr>
<tr>
<td>Custodian</td>
<td>Hair Stylist</td>
</tr>
<tr>
<td>Truck Driver</td>
<td>Restaurant Worker</td>
</tr>
<tr>
<td>Telephone Repair Person</td>
<td>Cable Repair Person</td>
</tr>
<tr>
<td>Fish Plant Worker</td>
<td>Food Processing Worker</td>
</tr>
<tr>
<td>Forestry Worker</td>
<td>Fisher</td>
</tr>
</tbody>
</table>

---

# Gearing Up For Safety!

There are many fun activities that require the use of personal protective equipment. Here are some examples of leisure activities that require personal protective gear. Beside each, list the PPE required.

- **Cycling**
- **Soccer**
- **Skateboarding**
- **In-line skating**
- **Sledding**
- **Snowmobiling**
- **Hockey**
- **Down hill skiing**
- **Baseball**
- **Boating**
# Mix & Match

Match the person with their correct equipment and personal protective equipment.

For example: roller blader + roller blades + knee, elbow and wrist pads

<table>
<thead>
<tr>
<th>Person or job</th>
<th>Equipment</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>window cleaner</td>
<td>bike</td>
<td>ear plugs</td>
</tr>
<tr>
<td>biker</td>
<td>ladder</td>
<td>seat belt</td>
</tr>
<tr>
<td>chef</td>
<td>loud machines</td>
<td>lab coat</td>
</tr>
<tr>
<td>scientist</td>
<td>boat</td>
<td>body harness</td>
</tr>
<tr>
<td>fire fighter</td>
<td>chemicals</td>
<td>helmet</td>
</tr>
<tr>
<td>construction</td>
<td>car</td>
<td>apron</td>
</tr>
<tr>
<td>worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>swimmer</td>
<td>hammer</td>
<td>steel toe boots</td>
</tr>
<tr>
<td>driver</td>
<td>pots &amp; pans</td>
<td>smoke mask</td>
</tr>
<tr>
<td>machinist</td>
<td>water hose</td>
<td>life jacket</td>
</tr>
</tbody>
</table>
**Stella’s Rockin’ Safety Rap**

**Purpose:** Help students connect safe decision making to every day actions and activities.

**Connections to You & Your World Outcomes:** 2.4.2

**Materials Required:**
- song lyrics (see **Appendix**)
- musical instruments (optional)
- Stop, Think, Do poster (part of program package)
- Stella

**Teaching Strategies:**

**Note:** Teaching students about safety through song and dance is a fun and interactive way to reinforce the concept that staying safe depends upon their ability to recognize potential danger, their willingness to make good choices and their commitment to act in a responsible and thoughtful manner.

1. As a class, decide what rap rhythm would work best for the students, then teach students the lyrics to “Stella’s Rockin’ Safety Rap” (see **Appendix**). Option to use musical instruments to accompany the song.

2. Once students have learned the original lyrics, have them work in small groups to create additional lyrics to add to the song.

You may also choose to have students create a dance that can be performed simultaneously with the song.

**Safety Song on Tour:** Encourage students to perform their rap and dance for younger classes or other groups within the school (optional).

**Assessment:** participation in song; see Extension

**Extension:**
1. Students share why it is so important to Stop, Think, Do when it comes to decisions that may impact their safety or the safety of others. Students provide a number of real life examples (written or via creating pictures) of when they should Stop, Think and Do.

2. **Mural, Mural on the Wall — Staying Safe Concerns Us All:** Attach a large piece of drawing paper to a wall in your classroom and divide it into three sections. Label the first section “Stop”, the second section “Think”, and the third section “Do”. For a period of one week (or longer if you choose), take a few minutes each day to have students add words, phrases or drawings under each of the mural headings. Lead a class discussion on the words, phrases and drawings that are added to the mural each day and find ways to connect them to the health and safety issues that students encounter in their daily lives.

**Appendix (follows):** Stella’s Rockin’ Safety Rap
Stella’s Rockin’ Safety Rap

Yo, yo, yo listen up,
To what we have to say,
You gotta live real safe
Each and every day!

You gotta see the danger,
That is in your way,
When it comes to staying safe,
You know what to say...

I’m gonna stop then do,
‘Cause I’m always gonna think,
I’m gonna stay real safe
‘Cause getting hurt would really stink!

Yo, yo, Stella’s here to tell you,
You gotta walk, not run,
But hey, that doesn’t mean
We can’t all have fun!

Bein’ safe is really kinda neat,
It’s all about stayin on our feet,
Stayin safe is really kinda cool,
We always know exactly what to do...

I’m gonna stop then do,
‘Cause I’m always gonna think,
I’m gonna stay real safe
‘Cause getting hurt would really stink!
Pollution Patrol: Plants and Our Environment

**Purpose:** To help students identify common air pollutants and understand the important role plants and humans play in keeping air clean.

**Connections to You & Your World Outcomes:** 2.5.4, 2.4.2

**Materials Required:**
- “Pollution Catcher” template sheets (see Appendix)
- tape or sticky labels, string & hole punch
- copies "Pollution Patrol" worksheet (see Appendix)
- scissors & Stella
- magnifying glass (optional)

**Teaching Strategies:**
1. Begin the lesson by having Stella tell students that she sees lots of different plants and trees in her travels. Ask students to explain why plants and trees have such an important role in keeping our air clean.

Next, have Stella explain that although she sees a lot of pollution in her travels, there is a lot of pollution that we can’t see. Have her explain that dust and other tiny particles in the air can make us sick, especially if we have allergies or asthma. Have Stella tell students that they are going to do an experiment to find out what types of pollution are in the air that they are breathing.

2. Place students into small working groups. Have each group make four pollution catchers. Give each group two “Pollution Catcher” template sheets (see Appendix) and have them cut out the catcher shape. Students must cut out the black rectangle in the center of the catcher and cover over the rectangle with sticky tape or paper (e.g. packing tape or labels).

Next, have them hole punch the black circle on their catcher and tie a string through the hole. Have students hang or tape catchers in different areas of the classroom or school (e.g. near their desks, on the inside or outside of a window, near a heating vent, on a wall near the floor or ceiling, on or near a door, etc.). The catchers can be left up for several hours or days. Upon completion of the activity, have students take the catchers down and inspect them with a magnifying glass.

3. Students complete the “Pollution Patrol” worksheet (see Appendix).

End the activity by reviewing the “The Dirt on Air” information sheet (see Appendix).

**Assessment:** effort in group assignment; content and completeness of worksheet

**Extension:** Through illustrations with captions, students depict the following:
- How they can help contribute to clean air in the environment;
- Their personal role in reducing pollution;
- How they can contribute to keeping plants and the environment clean and safe.
Appendix 2-10

The Dirt on Air

Humans take 23,000 breaths every day. We need to breathe in order to get oxygen from the air for our lungs, heart and blood to survive. When air is dirty, it can make it hard to breathe and sometimes, it can make us sick!

How does the air get dirty?

Dirty air comes from pollution. Pollution comes from human-made sources like cars, trucks and smokestacks. Some pollution comes from natural sources like fires.

What does air pollution do?

Humans are hurt by air pollution, but we are not the only ones. Animals like birds, butterflies and even fish can be affected by air pollution. Dirty air can make it hard for plants to grow. You can also see the effects of pollution outside of buildings or on statues.

How does the air get clean?

Green plants use a process called photosynthesis to turn carbon dioxide, and other gases that are bad for us, into oxygen that we need. By taking these gases out, plants like trees and bushes help clean the air. This is why it is important to grow and protect these types of plants.

KEY: Reduce, reuse & recycle!
Pollution Patrol Worksheet

Name: ______________________________
Date: ____________________________ __________

1. Describe what you see on your four “Pollution Catchers”.

Catcher #1:

Catcher #2:

Catcher #3:

Catcher #4:

2. Which area had the most pollutants in the air? Why do you think this was the case?
Location:

Starting Date:

Time:

---

Location:

Starting Date:

Time:
Home Safe Home

**Purpose:** To help students understand that our homes can be made safer if preventative measures are taken.

**Connections to You & Your World Outcomes:** 2.4.2, 2.2.1

**Key Concepts:** Staying safe is the result of recognizing potential dangers in our environment and taking the necessary precautions to avoid dangers and acting responsibly at all times.

**Materials Required:**
- one copy of the house silhouette template for each student (see Appendix)
- construction paper
- string and hole punch
- scissors & Stella
- Stop, Think, Do poster (part of program kit)

**Teaching Strategies:**

**Note:** This lesson would be a good opportunity to read aloud *Home Safety* by Peggy Pancella (this book is part of the program kit and can be found in your school library).

1. Introduce the activity by having Stella explain to students that even though sometimes she lives in the city and sometimes she lives in the country, she always takes measures to make sure that her space is safe at all times.

2. Use Stella to initiate a discussion with students that will reinforce the concept that our homes can be made safer if preventative measures are taken. Ask students to list the different rooms many of us have in our homes and record their responses on the blackboard. Next, starting at the top of the list, ask students the following questions for each room they have listed (or students can do this with a partner):

   - How much time do we spend at home?
   - How much time do we spend in the different rooms of our homes?
   - What kinds of activities do we do in each of these rooms?
   - What are some dangers/hazards that exist in each room of your house?

3. Discuss the fact that many accidents occur at home, but they can be prevented if we think about how to stay safe and make good choices. In other words, if we Stop, Think, Do at all times (refer to poster).

4. Have each student cut out the house silhouette template (see Appendix) and use it to cut out the shape on a piece of construction paper. Students will draw a picture on their cutout that illustrates an action or behavior that helps prevent household accidents. Use a hole punch and string to bring all the house silhouettes together to make a class book.

**Assessment:** participation in class discussion; identification of a safe action or behavior on house silhouette
**Extension:**
1. Over a period of time, students collect (or the teacher collects) newspaper clippings that refer to accidents that have occurred in people’s homes. Discuss with students the ways in which these accidents could have been prevented.

2. Students write in their journal on how they contribute to making their home safe. Reflect on the rules they follow at home to create a safe environment and what would happen if they didn’t follow the rules. Similar can be done by students as they reflect on their role in following rules for keeping the school and community safe.

**Appendix (follows):** house silhouette template
Searching for Safety

**Purpose:** To help students identify health and safety hazards.

**Connections to You & Your World Outcomes:** 2.4.2, 2.1.3, 2.2.1

**Materials Required:**
- Paper, pencils & Stella
- copies of “Home and School Safety Inspection Report” for each student (see Appendix)

**Teaching Strategies:**
1. Introduce the activity by having Stella ask students if they have ever had to search for something (e.g. a lost sock, a favorite book or video tape, a favorite T.V. program, etc.). Have Stella explain to students that her skunk friends in the wild spend most of their time searching for food and a safe place to rest. Have Stella tell students that today they are going on a search, but instead of being skunks searching for food, they will be safety inspectors searching for hazards and dangers.

2. Ask students to identify three potentially dangerous objects found in the school and three potentially dangerous activities that can occur on the school grounds. Explain to students that everyday objects can hurt us if they are not used properly and everyday activities can lead to injuries if they are done without exercising caution. Tell students that we call these objects and activities hazards.

3. Organize students into inspection teams (or done as a class) and distribute “School Safety Inspection Report” worksheets (see Appendix). Explain to students that the job of a safety inspector is to look for hazards in a workplace and to recommend ways to stay safe around various hazards. Next, assign each group an area of the classroom or school (entrance, hallway, washroom, etc.) and have each team work together to inspect their space. As a group, they will work together to identify the hazards in their inspection area (e.g. coat hooks, objects at eye level like shelves, sharp objects such as scissors, etc.), and complete a report. You may need to guide students through the activity initially as some hazards may not be obvious. Remind students that they should find and record hazards, but they should not touch hazardous objects or engage in any hazardous activities while completing the task.

**Assessment:** participation in group task; content and completeness of inspection report

**Extension:** 1. Have students work with an adult to complete a “Home Safety Inspection Report” for an area in their home (see Appendix).

2. Have each group create a list of safety rules for their assigned area, which can help protect their safety and the safety of others. Students design a sign that lists their safety rules. Post the various signs in the appropriate places throughout the school building.

3. Students write a journal entry or create a picture that would represent what they can do at home, school and within the community to protect themselves and others from dangers/hazards.

**Appendix (follows):** School Safety Inspection Report; Home Safety Inspection Report
School Safety Inspection Report

Name of inspector(s):

Date of inspection:

School to be inspected:

Place to be inspected:

Objects that could cause harm:

Activities that could cause injury:

Suggestions for staying safe:
Appendix 2-12

Home Safety Inspection Report

Name of inspector:

Name of senior inspector (parent/guardian):

Date of inspection:

Place in home to be inspected:

Objects that could cause harm:

Activities that could cause injury:

Suggestions for staying safe:
Our Role in Change

**Purpose:** To help students understand their role in creating change within the home, school and community as it relates to creating a safe and healthy environment.

**Connections to You & Your World Outcomes:** 2.2.1, 2.2.3

**Materials Required:**
- construction paper
- markers/crayons
- Stella
- paper, pencil & ruler

**Teaching Strategies:**
1. Stella leads the discussion with the class:
   - What changes have they noticed within their community in the past few years?
   - Who do they think contributed to these changes?
   - Do they think their community is a safe place to live?
   - What takes away from the safety of their community?
   - How can they make their community a safer place?

2. Students divide a page into three sections. They will label the sections as follows: school, home and community. Under each heading, students will list words that represent what they can do to make each area safer.

   Request that students share their key words with the class. The teacher will review how change comes from all of us. If we wish to make changes at school, in our home and/or within the community, we can so do. We all have a contribution to make especially when it comes to making it a healthier and safer place for all to live and work.

3. Students are responsible for designing a new line of greeting cards related to safety within the community. The themes of the cards should be: how we can contribute to change within the community, to make it a safer and healthier place for all.

   The cards can be designed for any age group. Students can send their card to the Mayor or local town council, a friend, parent etc.

**Assessment:** contribution to class discussion; key words in written activity; effort and content of created card

**Appendix:** N/A
The Playground of the Future

**Purpose:** To help students discover safe practices in the design, construction and use of playground equipment; research, present and design safety standards and use this information to design a playground of the future.

**Connections to You & Your World Outcomes:** 2.2.1, 2.4.2

**Key Concepts:**
- An estimated 28,500 playground-related injuries are treated in hospital emergency departments every year throughout Canada. From 1998-2002, there were over 1,200 playground-related injuries reported at the IWK Emergency Department alone.

**Materials Required:**
- Paint & paint brushes (optional)
- Stella & drawing paper
- paper, pencils, crayons/markers

**Teaching Strategies:**

**Note:** This lesson would be a good opportunity to read aloud *Playground Safety* by Peggy Pancella (this book is part of the program kit and can be found in your school library).

1. Stella asks the students about the various playgrounds in the area. Lead the discussion on students’ experiences with playground injuries. Provide students with a chance to share their stories/experiences related to playground safety. Brainstorm solutions that may prevent future injuries from occurring on the playground.

2. Students create a set of safety guidelines for playground use OR read aloud Safety Tips for Playgrounds (see Appendix) and ask for volunteers to comment on the tips.

With this information and their imaginations, the students will design a fictitious playground for the future, a playground that keeps users safe and prevents injuries. OR students will design one piece of safe equipment for the playground. Students will be able to describe how their playground will promote health and safety and prevents injuries.

Students will use art materials to create a display of their playground

**Note:** see Appendix for student directions for this activity.

3. Students share their created playground with the rest of the class. Peers provide feedback on the design.

**Assessment:** students evaluate each other’s work; teacher assessment of participation; effort put into the design and write up
Extension:
1. Students present their playground designs to school administration, joint health and safety committee and/or to the Parent Advisory Committee.

2. Students submit a journal entry or picture that depicts what they can personally do to make their school playground a safer place for all students. What things might they change about the playground to make it safer?

Appendix (follows):
1. Constructing a Playground (student instructions)
2. Safety Tips for Playgrounds

Appendix 2-14

Constructing a Playground

Student Instructions

Your group has been hired to construct a new playground for the school. The school is concerned that the existing playground is not safe as many injuries are taking place.

Use the materials provided to design and create the new playground OR one piece of playground equipment.

Remember - you want to create a fun, exciting and safe playground!

Your group can work together on the playground OR each group member may wish to work individually on a part of the playground.
Appendix 2-14

Safety Tips for Playgrounds

- Equipment should follow CSA standards (and/or municipal or other accepted safety organization).
- Students should be taught the correct methods of using the equipment.
- Protective caps should be placed on protruding and exposed bolts or hazards.
- Equipment is stable and well spaced apart.
- There are no sharp angles or edges on any of the equipment.
- Products that won't cause splinters should be used.
- Equipment should be inspected on a regular basis.
- Rules should be in place for proper conduct on equipment.
- Grass, sand or other soft surfaces should be used around equipment.
- The equipment should be age-appropriate.
- Swings should be anchored securely.
- Ladders and other climbing apparatus should have slip-resistant surfaces.
- Playground equipment should be used for what it is intended (e.g. slide feet first; sitting up; sit on swings; use steps).
- Clothing can be hazardous around certain equipment. For example, tie up or avoid wearing totally: strings from hoods and coats, scarves or any loose clothing.
- Proper footwear should be worn.
- Stay clear from swinging swings (front and back) and the bottom of a slide.
- Glass products should not be permitted on the playground.
- One person should slide at a time.
- No pushing, shoving or tripping on or around equipment.
- In bad weather equipment should not be used.

Adapted from The Calgary Injury Prevention Coalition and the Physical Education Safety Manual Draft, Play Safe, 1994, New Brunswick
Quick Ideas for Grade 2

Idea #1

**Theme:** Qualities of a healthy and safe environment

**Connections to You & Your World Outcomes:** 2.4.2

**Quick Idea:** Students complete the following chart

---

### Qualities of a Healthy & Safe Environment

<table>
<thead>
<tr>
<th>Qualities of a healthy &amp; safe environment</th>
<th>Role in protecting your health &amp; safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>keep floors clean; push in chair</td>
<td>to avoid slips, trips or falls</td>
</tr>
</tbody>
</table>

---

Stella the Safety Skunk program, Grade 2  
WorkSafeNB
Idea #2

**Theme:** Rules and responsibilities

**Connections to You & Your World Outcomes:** 2.4.2, 2.2.1

**Quick Idea:** Rules are created to help protect the well-being of others. Definition of rule: a statement of what to do and not do; principle governing conduct, action.

Students reflect on all the events in their day and list the rules, personal responsibilities and rationale that corresponds with each event/task. For example:

<table>
<thead>
<tr>
<th>Rules &amp; Responsibilities</th>
<th>Why follow them</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. go to school</td>
<td></td>
</tr>
<tr>
<td>A) be on time</td>
<td>A) don’t want to hold others back, or miss anything</td>
</tr>
<tr>
<td>B) pay attention to directions</td>
<td>B) so I will know what to do and how to do it correctly</td>
</tr>
<tr>
<td>C) respect others</td>
<td>C) treat people the way I want to be treated</td>
</tr>
<tr>
<td>D) do my work</td>
<td>D) practice what I learn</td>
</tr>
<tr>
<td>2. play soccer</td>
<td></td>
</tr>
<tr>
<td>A) play fair</td>
<td>A) is more fun and is safer</td>
</tr>
<tr>
<td>B) don’t play rough</td>
<td>B) I don’t want to hurt myself or others</td>
</tr>
<tr>
<td>C) listen to my coach</td>
<td>C) learn new things</td>
</tr>
<tr>
<td>D) play the best I can</td>
<td>D) for enjoyment and exercise</td>
</tr>
</tbody>
</table>
Idea #3

Theme: The world of work

Connections to You & Your World Outcomes: 2.1.3, 2.2.1, 2.3.1, 2.4.2

Quick Idea: It is important that students explore a wide range of job opportunities, the role of jobs in society and the various safety issues associated with these jobs.

A) Students take on the role of a reporter and conduct an interview with someone they know who is working.

Suggested interview questions are as follows:
• Tell me about your job.
• Describe a typical working day.
• How did you learn to do your job?
• What are some of the safety concerns on the job?
• How do you protect you safety on the job?
• What do you like most about your job?
• What rules do you need to follow on the job?
• What do you enjoy least about your job?

B) In groups or as a class, discuss the following:
• What types of jobs do you presently do around the house (e.g. put out the garbage, help with dishes, clean your room)?
• How do you think your jobs around the house will change in five years?
• What type of job would you be interested in pursuing?
• Who can do this job: be a nurse, a doctor, a lawyer, a construction worker (list many types of jobs that might typically be dominated by one gender)? The point of the exercise is for students to understand that they can do any job they wish as long as they work towards it.
• Students set a goal regarding their future and “dream job” (e.g. I will work hard in school).

Idea #4

Theme: Safety word hunt

Connections to You & Your World Outcomes: 2.4.2

Quick Idea: Prior to class, the teacher will cut construction paper into rectangles the size of playing cards. Then on each card, write a safety-related word or statement (see suggestions on following page). Provide small groups of students with a number of the cards, asking them not to look at the words written on the cards. Taking their turns, each student will hold a card to their forehead, without looking at the word. The other group members will describe/provide clues regarding the word on the card without using the actual word as the student attempts to guess what word is on the card. Once the word has been guessed, the student creates a sentence using the word and/or spells the word correctly. The next student then takes their turn.
The following are suggested words and statements for the cards:

- Look both ways
- Seat belt
- Bike helmet
- Sunscreen
- Ask for help
- Strangers
- Sidewalk
- Lock the door
- Call for help
- 911
- Stop, drop and roll
- Tell someone you trust
- Walk, don't run
- Life jacket
- Cross walk
- Never skate alone
- Shoe laces
- Winter hat
- Accident
- Sun glasses
- Knee pads
- Rules
- Dangers
- Fire extinguisher
- Fire evacuation plan
- Pay attention
- Just say 'no'
- Watch for dangers
- Emergency
- First aid kit
- Stop sign
- Listen to directions
- Stop, think, do