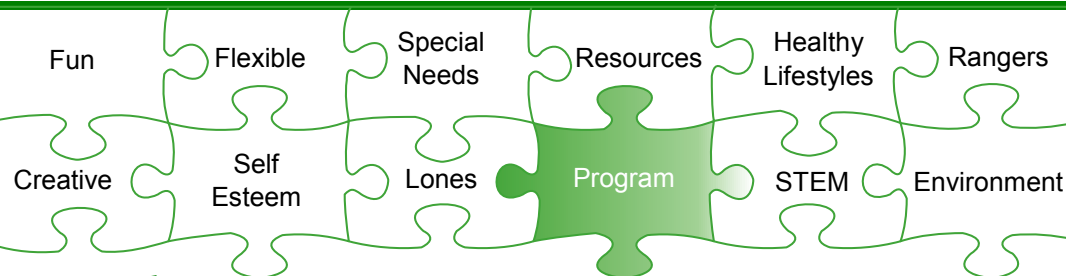




Girl Guides of Canada  
Guides du Canada

BC PROGRAM COMMITTEE



# FunFinder

January 2014

## Operation Earth Action Issue

Operation Earth Action is the 2012-2014 National Service Project (NSP) for Girl Guides of Canada - Guides du Canada. This NSP is based on the United Nations' Millennium Development Goal #7: Ensure Environmental

Sustainability.

Every unit is encouraged to take part in this initiative, and to log your actions on the NSP website at <http://nsp.girlguides.ca>.

Once you have logged your actions, you can



purchase your Operation Earth Action crest from the online store.

<https://www.thegirlguidestore.ca/>

### Inside this issue:

<u>Pledge to Use Reusable: Water Bottles and/or Shopping Bags</u>	2
<u>Map Your Meal</u>	7
<u>Make Your Own Green Products</u>	10
<u>Plant a Tree</u>	14
<u>Be an Energy Detective</u>	17
<u>Supporting Animal Habitats</u>	23
<u>Transforming Trash to Treasure</u>	28



## Operation Earth Action Activities

To earn your Operation Earth Action crest, you must complete at least two activities from the seven sections below:

1. Pledge to use reusable: water bottles and/or shopping bags
2. Map your meal
3. Make your own green products
4. Plant a tree
5. Be an energy detective
6. Supporting animal habitats
7. Transforming trash to treasure

Although you only need to do two activities, the more activities you do,

the more we can help the environment!

The NSP website suggests activities for each of these sections. The BC Program Committee has come up with additional, alternate activity ideas for each of the seven sections. You are welcome to adapt any of the ideas found online or in this issue of the FunFinder to meet the objectives of the challenge. The goal is to encourage our members to work together to make a difference for our world.

Visit <http://nsp.girlguides.ca/home.aspx> to view the complete Operation Earth Action package (there is a link at the bottom of the page).

Don't forget to **LOG YOUR ACTIONS** by clicking the "Take Action" button for each section you complete, then submitting your actions using the Unit or Individual reporting buttons on the right side of the screen.

**TAKE ACTION!**



The BC Program Committee is a busy and rewarding committee to be a part of. We create challenges, produce the FunFinder, provide trainings for Guiders and host Girl Events. We work as a team for many of our activities, but also have individual responsibilities based on our positions.

We are currently looking to fill a number of positions on our team with dedicated Guiders who are passionate about the program.

Please see the last page for more information.



# PLEDGE TO USE REUSABLE: WATER BOTTLES AND/OR SHOPPING BAGS

## My Pledge to Save My Environment

### Plastic Water Bottles:

#### Did you know ...

- ... Bottled water can contribute to world water shortages because to manufacture a one litre water bottle, it takes 3 to 5 litres of water.
- ... In 2009, Stewardship Ontario said that 44% of plastic bottles or 30,906 tonnes of plastic bottles ended up in landfills.
- ... It takes approximately 700 years for a plastic bottle to decompose
- ... choosing to use a reusable water bottle, saves both the environment and money! It costs up to \$2.50 for a litre of water, but tap water is free.

### Plastic Shopping Bags:

#### Did you know ...

- ... 17,000 plastic bags are used every minute in Canada. In a year, this is enough bags to go around the world 55 times.
- ... that the plastic bag that you chose to use for a few minutes can take up to 1000 years to decompose.
- ... plastic bags can kill wildlife who mistake them for food.
- ... Using a fabric shopping bag impacts the environment in a positive way from the first time that you use it, and they will last for years.



I pledge to help reduce waste by:



- ☐ Choosing to use a re-usable drink container whenever possible
- ☐ Choosing to use a re-usable shopping bag whenever possible

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

Girl Guides of Canada is asking that you pledge online and log your National Service Project actions. Go to <http://nsp.girlguides.ca/pledge.aspx> to do this.

\_\_\_\_\_  
Date my pledge was logged with Girl Guides of Canada



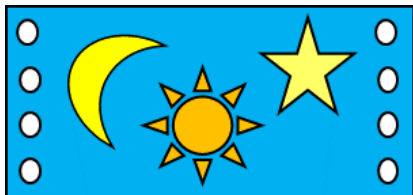
## Foam Water Bottle Carrier

### Supplies

- reusable water bottle
- measuring tape
- 1 foam sheet (8.5" x 11") and foam scraps
- scissors
- plastic lacing
- ¼" hole punch
- glue
- elastic band
- paper and pencil
- coordinating duct tape

### Directions

1. Measure the height of the water bottle and divide in half. Write this number down.
2. Measure the circumference of the bottle and add one inch. Write this number down.
3. Measure and cut out a rectangle from one of the foam sheets using your first measurement for the height and your second measurement for the length. For example, if your bottle is 9 inches high and 5 inches around, your foam rectangle will be 4.5 inches X 6 inches.
4. Punch 1 hole every inch of the height at both ends so they match up.
5. Cut shapes out of other pieces of foam and decorate.
6. Cup Sling: Cut a 7" piece of duct tape. Tape one end 1/3 of the way into the left side of the rectangle, parallel to the short side. Tape the other end 1/3 of the way into the right side of the rectangle, parallel to the short side. Do not let your sling to drop below the bottom of the foam.



7. Shoulder Strap: Cut a piece of duct tape about a metre long.

## Environmentally Friendly Cups

### Supplies

- plastic cups with lids – preferably white or a light colour
- permanent markers in a variety of colours
- jewels for bedazzling

### Ideas for your cups:

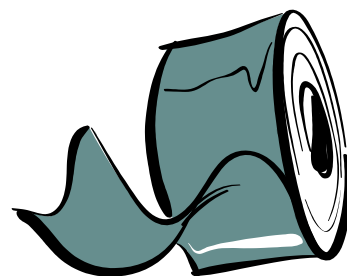
- positive words – have each girl write her own name on a cup, then pass it around to everyone in the group to write a positive word about that person, i.e. caring, amazing, kind, friendly etc. In the end, the girls will each have a personalized cup that will remind them of the positive examples they are to everyone around them.
- Create a work of art using simple designs like Australian dot painting, Warli art, tribal designs, etc. or intricate designs of leaves, swirls, flowers, etc.
- bejewel the cup with rhinestones (be careful when washing)

Note: You could also decorate plastic water bottles with permanent

markers. Just make sure that you experiment ahead of time to see that the colours stay on when washed.



*The cups shown here were decorated by girls at Ranger Revolution in an environmental awareness session led by Becca Stephen and Sandra Allen.*



8. Fold it in half lengthwise. Using duct tape, tape 3-4 inches of each end securely to the back of the foam.
9. Wrap the foam around your water bottle and hold in place with a rubber band so the holes on both ends match up.
10. Cut a 5" piece of plastic lacing for every two holes. Match the holes on one side of the foam to the holes on the other side. Thread

the lacing through the top hole on one end of the rectangle, then the top on the other end. Tie a knot. Repeat with the remaining pieces of lacing and the remaining holes.



# Duct Tape Water Bottle Carrier

## Supplies

- 2 coordinating colours of duct tape
- ruler
- scissors
- measuring tape
- pencil and paper

## Directions

1. Bottom straps: Cut two 5 x 23 cm strips. Fold in half lengthwise and set aside.
2. Shoulder strap: Cut 2.5 cm x 1 m strip. Fold in half lengthwise and set aside.
3. On your paper make a table similar to this one:

	Inside	Outside
Height of bottle		
Circumference of bottle		

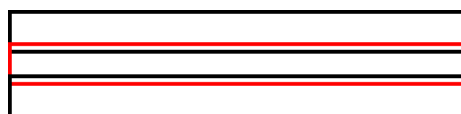
- a) Measure the height of the bottle
  - Divide by 2 – write this number under “inside”
  - Add 2.5 cm to the above measurement and write this number under “outside”.
- b) Measure the circumference of the bottle (all the way around)
  - Write this number under inside rectangle
  - Add 2.5 cm to the above measurement and this write number under “outside”.

## Example:

	Inside	Outside
Height of bottle 15 cm	7.5 cm	10 cm
Circumference of bottle 15 cm	15 cm	17.5 cm

4. You will now be making rectangles out of duct tape by taking strips of duct tape and overlapping a little to make your rectangle more secure. Use the measurements that you've put

into the table above to make an inside rectangle (eg 7.5 x 15 cm) and an outside rectangle (e.g. 10 x 17.5 cm).



## Example:

Once your inside rectangle is made, set aside. You will need your outside rectangle for the next step.

5. Lay the outside rectangle on the table in front of you. You will need the 5 x 23 cm strips.

- a) Take the first strip (strip a) and place the top 5 cm of tape in from the right and running parallel to the short side.
- b) Take the second strip (strip b) and place the top 5 cm of tape 2.5 cm to the left of “strip a”.
- c) Take the other end of “strip a” and place it 2.5 cm to the left of “strip b”.



- d) Take the other end of “strip b” and place it 1 inch to the left of “strip a”.



- e) These 4 steps form the sling

that the bottom of your bottle will sit in.

6. Next, take the 1 metre strip and attach it to the outside rectangle above the top and bottom pieces of “strip b”.
7. You are now ready for the inside rectangle. Working from the left, line up the two rectangles at the short side and bottom and carefully put them together. You will have about 2.5 cm at the top and 2.5 cm at the left that are still exposed.
8. Roll the rectangles and use the exposed tape on the left side to seal them into a tube.



9. Cut a strip of your coordinating colour and wrap it around the outside top to cover the exposed sticky edge of duct tape. Use the coordinating colour to decorate your water bottle carrier before placing in your bottle!



## Pillowcase Garment Bag

Make a garment bag from an old pillowcase to protect nice clothes from dust.

### Supplies

- ruler
- hanger
- sewing needle
- old pillowcase
- spool of thread
- permanent marker
- pair of scissors or a stitch ripper

### Directions

1. Wash and dry an old pillowcase.
2. Use an iron to remove all the wrinkles in the pillowcase.
3. Fold the pillowcase lengthwise (hotdog style) to locate the center on the closed end.
4. Use a pair of scissors to cut a small hole at the center of the pillowcase. The hole should be about 2-3 cm in width so that a hanger could fit through it.
5. Use a needle and some thread to stitch around the hole, reinforcing the opening. This is to prevent the hole from ripping.
6. Place a hanger through the hole of the pillowcase, which can now be used as a garment bag.



Have you ever wondered what to do with old pillowcases and T-shirts that do not fit anymore? Here are some fun ideas to turn those two things into reusable tote bags, shoe bags, book bags and garment bags.

Some of these transformations do not require any sewing!

## Pillowcase Laundry Bag

Make a reusable drawstring laundry bag for camp using an old pillowcase. This laundry bag could be hung on a doorknob or on a hook. No sewing required.

### Supplies

- old pillowcase
- safety pin
- pair of scissors or a stitch ripper
- 2 m of ribbon (width should be at least 2 cm)

### Directions

1. Wash and dry an old pillowcase.
2. Use an iron to remove all the wrinkles from the pillowcase.
3. Locate the seam on the two sides of the pillowcase. On the open end of the pillowcase, use a pair of scissors or a stitch ripper to cut along the seam, starting at about 2 cm from the top edge of the pillowcase. Cut open the seam only on the outside surface of the pillowcase, leaving the seam of the inside surface intact. The hole should be the width of the ribbon that will be used as the drawstring.
4. Repeat step 3, but this time, starting on the other side of the pillowcase.
5. When you are finished, there should be two holes near the open end on both sides of the pillowcase.
6. Use a pair of scissors to cut two strips of ribbon that are each 1m in length.
7. Fasten a safety pin to one end of the ribbon. Feed the safety pin through one hole in the pillowcase along the casing's edge until you end up where you started. The ribbon should form a loop in the pillowcase.
8. Remove the safety pin from the

ribbon. Tie the two ends of the ribbon together, making a knot.

9. Fasten a safety pin to one end of the second ribbon. Feed the safety pin through the hole, starting on the other side of the pillow case. Push the safety pin along the casing's edge until you end up where you started. The ribbon should form a loop in the pillowcase. The ends of this ribbon should be on the opposite side of the other ribbon.
10. Remove the safety pin from the ribbon and tie the two ends of the ribbon together, making a knot.
11. Pull the two ribbons on both sides at the same time to close the open end of the pillowcase. Use it as a reusable laundry bag.



### Alternate suggestions:

- Use a plain white pillowcase and tie dye it to make it more colourful or use fabric paint to decorate the pillowcase.
- Use the drawstring pillowcase as a trick-or-treat bag for Halloween.
- Use rope instead of ribbon for the drawstring.



## T-Shirt Book Bag

Make a book bag from an old T-shirt. No sewing required.

### Supplies

- ruler
- stapler
- staples
- duck tape
- old T-shirt
- pair of scissors
- permanent marker



### Directions

1. Wash and dry an old T-shirt.
2. Use an iron to remove all the wrinkles from it.
3. Lay it flat on a table.
4. Use a pair of scissors to cut off the sleeves along the seam.
5. Trim 2 cm along the outside of the neckline.
6. Turn the shirt inside out and lay it flat with the front of the shirt facing up.
7. Use duct tape to tape the inside of the shirt. Do this to the front and then the back of the shirt. This will create a plastic lining to the bag.
8. Use a ruler and measure 3 cm from the bottom of the shirt. Make sure the line is above the original hem. Use a permanent marker to draw a straight line across the bottom of the shirt.
9. Use a stapler and staple the bottom of the shirt together along the drawn line, making sure that the staples are side by side.
10. Place a strip of duck tape over the staple line so that it covers all the staples. Do this to the front and the back of the shirt.
11. Turn the shirt on its side.
12. Use a ruler and measure 5 cm from the corner tip of the shirt. Use a permanent marker to draw a straight line across the bottom.
13. Use a stapler and staple the

- bottom corner of the shirt. Do this to both sides.
14. Use a pair of scissors to trim off the pointy corner of the shirt about 1 cm below the staple line. Do this for both sides.
15. Place a strip of duck tape over the staple line, making sure it covers all the staples. Do this for the right and the left side of the shirt.
16. Seal off the seams on the two sides of the shirt starting from the armpit down to the bottom using duck tape. This will create a clean finish on the inside.
17. Turn the T-shirt right side out. It is ready to be used a tote bag to carry library books, program books to unit meetings, etc.



## T-Shirt Shoe Bag



Make a reusable shoe bag using an old T-shirt that does not fit anymore. This shoe bag could be used to carry your indoor shoes, water shoes, or runners to camp.

No sewing required.

### Supplies

- old T-shirt
- pair of scissors

### Directions

1. Wash and iron an old T-shirt.
2. Lay the shirt flat on a table.
3. Use a pair of scissors to cut off the sleeves along the seam.
4. Trim 2 cm along the outside of the neckline.
5. Cut off 3 cm at the bottom,

- making sure the hem is removed.
6. Cut strips along the bottom of the T-shirt so that they are about 2 cm in width. The strips should be about 6 cm in length.
7. Tie the front strip together with the corresponding back strip, making two knots. Do this all across the bottom so that it seals off the bottom.



## Jeans Purse

### Supplies

- old pair of jeans (find some at the thrift store)
- pair of scissors
- needle & thread
- fabric trimmings – ribbon, patches, buttons, etc.



### Directions

1. Cut the legs off of the jeans, at least 1 inch below the bottom of the back pockets and below the

- zipper.
2. Turn the top of the jeans inside out, and sew them closed where you cut the legs off. Turn right side out again.
3. Cut a strip at least 2 inches wide down the entire length of one of the leg pieces. Cut it to the length you would like for a strap.
4. Turn the handle strip inside out and sew it along the long end. This will form a "tube". Turn the tube right side out. You may need
5. a piece of dowel to help turn it. Sew each end of the handle to the inside of the jeans at the side seams.
6. If you would like to be able to close your purse, add a zipper or Velcro across the top opening.
7. Add buttons, ribbons, sequins, or anything else you would like to the outside of the purse.

Search online for various other jeans purse ideas. <https://www.google.ca/#q=jeans+purse+pattern>





# MAP YOUR MEAL

The idea behind "mapping your meal" is to determine the distance (known worldwide as "food miles") that the foods we eat travel before making it onto our plates. We want to know so that we can make smart decisions about where and whom we buy our food from – we should use our resources wisely, and be as "green" as possible.

However, it's hard to map a meal unless you know where your food is coming from, so before you do the "mapping" activity, start with a couple of simple activities.

## How Many Countries?

This activity can be done across all branches, dependent upon how much help is offered for the younger girls.

### Directions

1. Have the girls think about the last camp they went to and what they had for supper. Write down all the foods they remember (embellish if need be, rounding out the drink, salad and desserts)
2. Now, guess or look up where all the particular food items came from – if you had tacos, then jalapenos from Mexico, corn tortillas from South America, ground beef from Alberta, lettuce from the USA, etc.
3. The more countries involved in your meal, the more likely you'll have a large food travel distance.



## Where in the World?

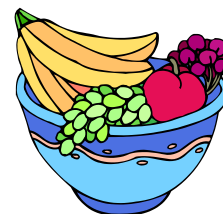
This activity can be done with all age groups, though Sparks and some Brownies may need help reading the text.

### Supplies

- grocery flyers
- scissors
- tape (or poster putty)
- large map (posted on the wall)
- photos of packaged foods clear enough to read country of origin (cheeses, breads, rice, etc)
- if preplanning, you could have the girls bring a photograph from home of a food that clearly identifies what country it comes from

### Directions

1. Have the girls look at grocery flyers for pictures of food, especially fruit and vegetables as many will state the country they are a product of: one flyer had cantaloupe from Guatemala, pineapple from Costa Rica, blueberries from Chile, rice from India and Granny Smith apples from the USA. Have each girl end up with one food from a country or part of Canada that is not BC. Note that if the fruit/vegetable origin is not listed, you can find a list of where different foods originate from on the National Service Project website at <http://nsp.girlguides.ca/doc/how-to-map-your-meal.pdf>
2. Have the girls read out their country and then search for that country on the posted map and tape it in position.
3. The girls will point out the distances of many of the foods.
4. To take it one step farther, have a pre-made grid of food miles - the miles from your town in BC to the many countries likely to be identified.



You can calculate these numbers online using the following website:  
<http://www.timeanddate.com/worldclock/distance.html>

- BC to Guatemala: 5,000 km
- BC to India: 11,000 km
- BC to Chile: 12,000 km
- BC to Costa Rica: 6,000 km
- BC to New Zealand: 11,000 km
- BC to New Brunswick: 4,000 km

**Even better!** Take the girls to a grocery store with a list of foods to read the labels of for country of origin.



## DID YOU KNOW?

BC grows 95% of the blueberries grown in Canada! Why, then, do we have flyers with blueberries from Chile?



## Homegrown Healthiness

Ultimately, our goal is to reduce food miles. Thus, the more we can eat that is locally grown, then the better we will all be!



### Directions

1. Have the girls make a list of the foods grown and raised within a 100 kilometer radius of their

hometown. Challenge them to think of accompaniments, spices, ingredients, etc. You'll be surprised at how much they can come up with!

2. Now have them become chefs renowned for their use of local foods! With the list of foods they have developed, have them create a menu that meets the needs of a balanced meal. Could

they make the same menu in the winter as they could in the summer? If not, why not?



## The Travelling Tomato Game

### Supplies

- 9 nametags for group 1: grower, picker, truck loader, truck driver, plane or ship loader, plane pilot or ship captain, warehouse owner, store owner, consumer
- 2 nametags for group 2: farmer, consumer
- washable ink
- two tomatoes

### Directions

1. Split the girls into a group of 9

and a group of 2. Distribute the nametags.

2. Start with group 1. The grower presses her finger onto the washable ink, then picks up the tomato (so that the ink transfers to the tomato).
3. The picker then presses her finger onto the washable ink, and takes the tomato from the grower – leaving her fingerprint on the tomato, as well.
4. Continue with the truck loader, truck driver, plane/ship loader, plane pilot/ship captain,

warehouse owner, store owner, and finally the consumer.

5. Now group 2 has their turn. Start with the farmer then pass to the consumer, also using the washable ink.
6. Finally, check out both of the tomatoes and how many fingerprints are on them. Which one would they be more likely to want to eat?

This game helps illustrate how food will be fresher and in better condition if it passes through less hands.



## Next Thing is Naked

The food mile and mapping a meal is just the first step in helping us create a more sustainable world. The next is to help our food go naked! That is a two-fold process: reducing the packaging required for our food and reducing the chemicals and processing needed to bring our food to the table.

As girls get more comfortable in recognizing that their food might have



"miles" on it, help them think about what else it might have: was it sprayed with a pesticide? Has it been sprayed with a preservative? Did it require special packaging for travel? Did it need to be re-packaged?

### Directions

1. For a week between meetings, have the girls keep a bag into which every piece of plastic or paper or metal or Styrofoam is put.
2. Take a picture of the bag or weigh it and have the girls compare their bags.
3. Award a crest to every girl who

took the time to recognize the impact of packaging.

4. Have the girls try to think of ways to reduce packaging or disposable products – such as reusable containers or buying from local farmer markets.





# Food Produced in British Columbia

Some climates in BC are conducive to year-round cultivation of a variety of produce including:

## Vegetables



Asparagus, Beans, Beets, Broccoli, Brussels sprouts, Cabbage, Carrots, Cauliflower, Celery, Chinese vegetables (Bok choy, Gai lan, Lo bok, Snow peas, Sui choy), Cilantro, Corn, Cucumber, Eggplant,



Fennel, Green onions, Leeks, Lettuce, Mushrooms, Onions, Parsley, Parsnips, Peas, Peppers, Potatoes, Rutabagas, Spinach, Sprouts (Alfalfa, Bean, Radish), Squash (Summer, Winter, Pumpkin), Tomatoes, Watercress



## Fruit

Apples, Apricots, Berries, Cherries, Cantaloupes &



other muskmelons, Grapes, Kiwis, Nectarines, Peaches, Pears, Plums, Prunes, Rhubarb, Watermelons

## Meats

Clams, Crabs, Oysters, Prawns, Shrimp, Cod, Halibut, Ling cod, Perch, Rockfish, Salmon, Snapper, Sole, Trout, Chicken, Duck, Goose, Turkey, Beef, Lamb, Pork, Rabbit, Veal, Bison, Deer, Reindeer



## Dairy Products

Eggs, Milk, Acidophilus milk, Buttermilk Yogurt, Cheese (Cheddar, Colby, Edam, Feta, Farmer's, Goat milk cheese, Gouda, Monterey jack, Mozzarella, Parmesan, Sheep milk cheese, Un-ripened cheeses



## Nuts and Beans

Filberts / Hazelnut, Lentils, Split peas



Reference: *B.C. Agriculture in the Classroom Foundation, Grow B.C.: A Teacher's Handbook on BC's Agriculture, Fish and Food Business.* (Abbotsford, BC: BC Agriculture in the Classroom Foundation, 1998), 182-184. For more information, see the BC Agriculture in the Classroom Foundation website at [http://aitc.ca/bc/bcs\\_agriculture/](http://aitc.ca/bc/bcs_agriculture/)

## Putting Yourself on the Earth Action Map

Time to put yourself on the website by making a difference!

Pick a meal that someone had and determine the food miles of the products used. An example might be chicken, carrots and potatoes.

Now see if that same or similar meal can be made using ingredients within that 100 kilometer radius.

Go to <http://nsp.girlguides.ca/meal.aspx> with the following information:

- the number of kilometres of your first meal
- the number of kilometres of your second meal.

When you report these numbers, Operation Earth Action will log the distance you have saved by eating locally!

## Online Resources

Food Miles Calculator:

<http://www.foodmiles.com/> (note that this website assumes that you are in Ontario when you choose Canada as your origin).

Where in the World does your food come from? A Series of Lessons on the Global Food System and Local Alternatives for the Elementary School Level:

[http://lifecyclesproject.ca/resources/downloads/Where\\_in\\_the\\_world.pdf](http://lifecyclesproject.ca/resources/downloads/Where_in_the_world.pdf)

Travelling Tomatoes: A Lesson in Food Sustainability:

<http://www.gbbr.ca/download/lessons-in-a-backpack/FOOD.pdf>

Food Miles: Growing Local Food Connections (Grades K-8).

Educational activities to teach your students about the food they eat and where it comes from:

<http://www.gardenabcs.com/uploads/foodmiles.pdf>

Climate Choices, Children's Voices.

See the Food Choices section:

<http://www.climatechoices.org.uk/pages/activities0.htm>

Food Miles activity booklet from Northern Ireland (includes a Chocolate Crunch Game similar to Travelling Tomato):

[http://www.nicurriculum.org.uk/docs/key\\_stage\\_3/areas\\_of\\_learning/learning\\_for\\_life\\_and\\_work/KS3\\_LLW\\_Integrated\\_Activities/FM\\_Booklet.pdf](http://www.nicurriculum.org.uk/docs/key_stage_3/areas_of_learning/learning_for_life_and_work/KS3_LLW_Integrated_Activities/FM_Booklet.pdf)





# MAKE YOUR OWN GREEN PRODUCTS

## All Purpose Cleaner



Make an all-purpose cleaning solution that will clean kitchen surfaces, mirrors and windows using vinegar. In addition to being environmentally

friendly, vinegar disinfects, absorbs odours, dissolves scum, and removes stains all at the same time.

### Ingredients

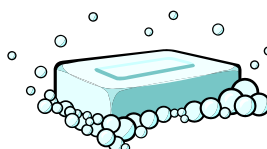
- ½ cup (125 mL) water
- lemon-scented essential oil
- 1½ cup (375 mL) white vinegar

### Supplies

- spoon
- spray bottle
- mixing bowl

### Directions

1. Add vinegar, water and 5 drops of the essential oil to a bowl. Mix well with a spoon.
2. Pour the contents of the bowl into a spray bottle and the cleaning solution is ready to be used on kitchen surfaces, mirrors, glass and windows.



## Shower Cleaner

Remove soap scum and clean the shower using vinegar and dish soap.

### Ingredients

- 1 cup (250 mL) dish soap
- 1 cup (250 mL) white vinegar

### Supplies

- dish scrubber
- plastic container

### Directions

1. Heat the vinegar in the microwave until it is slightly hot.
2. Add the dish soap and vinegar to a plastic container. Mix well.
3. Use a dish scrubber and the vinegar-soap mixture to clean the shower and bathtub.



## Lavender Disinfectant Water

Lavender can be used as a disinfectant to clean countertops and doorknobs around the house. It can also be sprayed into the air.

### Ingredients

- 1 cup (250 mL) fresh lavender
- 2 cups (500 mL) boiling water

### OR

- 2 cups (500 mL) water
- 5 drops of lavender essential oil

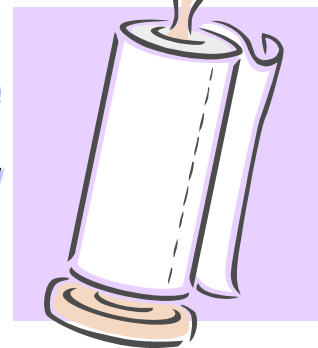
### Supplies

- square cheesecloth
- glass mixing bowl with a lid
- spray bottle

### Directions

1. Place the lavender in the square cheesecloth. Tie off the cheesecloth.
2. Put the cheesecloth with the lavender in a glass mixing bowl.
3. Boil some water with a kettle. Add the 500 mL of boiling water to the glass mixing bowl.

4. Cover the bowl with a lid and allow the water to cool.
5. Once the water is at room temperature, remove the cheesecloth with the lavender from the glass bowl.
6. Pour the lavender water into a spray bottle and store in a dry and cool location.
7. Alternatively, lavender essential oils can be added to 500 mL of water to get the same effect. Add the mixture to a spray bottle to use as a cleaner.



## Grease Fighter

Remove greasy fingerprints in the kitchen.

### Ingredients

- 1 teaspoon Borax
- 2 cups of warm water
- 1 teaspoon of baking soda
- 2 teaspoons of lemon juice
- 2 teaspoons of dish soap

### Supplies

- spray bottle

### Directions

1. Add the Borax, warm water, baking soda, lemon juice and dish soap to a spray bottle.
2. Mix the contents well.
3. Use the mixture to clean grease off the stove and kitchen surfaces.

## Drain Cleaner

Unclog the bathroom sink and bathtub drains using this simple recipe and set of instructions.

### Ingredients

- ½ cup (125 mL) vinegar
- ½ cup (125 mL) baking soda

### Directions

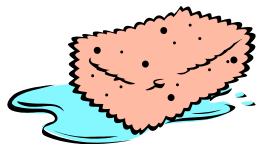
1. Pour the baking soda down the sink.
2. Next, pour the vinegar down the sink. This will cause a chemical reaction to break down the clog.
3. After 10-15 minutes, turn on the hot water tap and let the hot water run for about 1 minute.

## Mould Remover

Remove mould and mildew from the bathtub.

### Ingredients

- ½ cup (125 mL) 3% hydrogen peroxide
- 1 cup (250 mL) water



## Carpet Spot Cleaner

Use this simple solution to spot clean carpet.

### Ingredients

- water
- lemon scented essential oil
- 1 tablespoon white vinegar
- 1 tablespoon clear dish soap
- 2 cups (500 mL) warm water

### Supplies

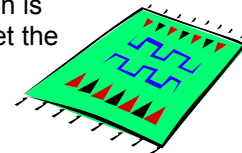
- spray bottle

### Directions

1. Place the essential oil, vinegar



- and dish soap into a spray bottle. Mix the contents by shaking the bottle.
2. Add the warm water and mix well.
3. To remove stains from a carpet, add some baking soda to the stain. Let the baking soda sit for 5 minutes.
4. Spray the vinegar-soap mixture onto the carpet until it is wet. Let the mixture sit for 5 minutes.
5. Scrub the carpet with the cloth until the stain is removed. Let the carpet air dry.



## Odour Remover

Use baking soda to remove odours.

### Ingredients

- 10 drops of essential oil
- 1 tablespoon baking soda
- 2 cups (500 mL) warm water

### Supplies

- spray bottle

### Directions

1. Add the essential oil, water and baking soda to a spray bottle.
2. Mix well.
3. Use the mixture to remove odours.



## Furniture Polish

Use a cleaner that does not contain any harmful chemicals to polish furniture.

### Ingredients

- ½ cup (125 mL) olive oil
- 4 tablespoons of lemon juice
- 10 drops of lemon scented essential oil

### Supplies

- glass bowl
- microfiber cloth

### Directions

1. Mix the olive oil, lemon juice and essential oil into a glass bowl.
2. Use a microfiber cloth and apply a small amount of the furniture polish to the piece of furniture.





# Homemade Natural Lip Gloss

## Ingredients

- coconut oil
- beeswax (grated or in pellets)
- A few drops of vitamin E
- A few drops of flavour oil (e.g. peppermint, orange, etc.)



## Directions

1. In the glass container, combine 2 parts of coconut oil and 1 part of beeswax.
2. Heat in the microwave on high until beeswax is completely melted, stirring every 30 seconds.
3. Add a few drops of flavour oil. You can combine flavours to make interesting mixes or leave them as a single flavor.
4. After adding the flavour, pour into containers and allow to solidify completely (about 15-20 minutes).
5. Add label or decorate with washi tape.
6. Note: flavours such as vanilla and coconut are milder than

## Supplies

- microwave-safe glass container with a spout (e.g. measuring cup)
- dropper
- 1-ounce or smaller jars, tubes or tins
- labels or washi tape (optional)



cinnamon, mint and citrus, so remember to adjust your flavour depending on what you are using. Test by dabbing a bit of the liquid mix onto your lips, but remember that as the lip gloss solidifies, the flavour will intensify.

# Bath Tea

## Ingredients

- Epsom salt or sea salt or both
- essential oil (orange, lavender, etc.)
- herbs (chamomile flowers, lavender buds, etc.)

## Supplies

- glass or metal bowl
- dropper
- small organza bags (found in the wedding section of dollar stores)
- airtight container (optional)



## Directions

1. Start with 4 cups of salt. A mixture of both Epsom and sea salt is nicest. In a glass or metal bowl, mix in desired amount of essential oil. Start with 16 drops per 4 cups of salt and add more until satisfied.
2. Add 1 cup of chamomile and  $\frac{3}{4}$  cup of lavender then mix well.
3. Take  $\frac{1}{2}$  cup of the mixture and put it in an organza bag and tie closed. You can either distribute all of the mixture into the organza bags, or store the remainder in an airtight container.

4. When ready to use, hang the bag under running water (it could be hung from the spigot of your bathtub). Once the mixture in the bag has been used, empty it out, rinse, dry and refill from the airtight container.

## Mix it Up with Scents

- Essential oils: spearmint, grapefruit, mandarin, bergamot or rosewood.
- Mix in: powdered milk, baking soda, cornstarch, ground oatmeal. All of these are skin softening agents.
- Herbs: rosemary, basil leaves, rose petals, calendula flowers.

# Creamsicle Bath Salts

## Ingredients

- 4 cups Epsom salt
- $\frac{1}{2}$  tsp liquid glycerine
- essential oils or extract (vanilla and orange extract)
- paste food colour - orange

## Supplies

- 2 glass or metal bowls
- dropper
- toothpick to add paste food colour
- canning jars with lids
- homemade labels

## Directions

1. Mix the glycerine and salt together. Divide into 2 bowls.
2. To the first bowl, add orange extract with a tiny bit of orange food colouring.
3. In the second bowl, add vanilla extract and leave it white.
4. You now have a bowl of "cream" and a bowl of "orange".
5. Use canning jars to hold the finished bath salts. Layer the two colours together to create a swirl affect.

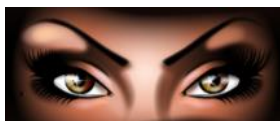
6. Seal the jar and add a nice round of fabric and/or a ribbon and label to finish.



## Homemade Eye Makeup Remover

### Ingredients

- 1 cup water
- 1½ tbsp baby shampoo (tear free)
- ¼ tsp almond oil or olive oil



### Supplies

- small container with a spout (such as a measuring cup)
- small bottle with lid (s squirt spout is ideal)



### Directions

1. In a small container, mix the ingredients together gently to avoid forming bubbles.
2. Pour gently into bottle and close lid.
3. To use: Pour a small amount on a cotton ball and gently wipe to remove make-up.



## Online Beauty Product Recipes

Coconut Lavender Conditioner:

<https://www.google.ca/#q=homemade+coconut+lavender+conditioner>

Homemade Coconut Milk:

<https://www.google.ca/#q=homemade+coconut+milk+shampoo>

Sugar Scrub:

<https://www.google.ca/#q=sugar+scrub+recipe>

Lotion Bars:

<https://www.google.ca/#q=lotion+bars>

## Bath Bombs

### Ingredients

- 2 parts baking soda
- 1 part citric acid, aka "Sour Salt" at the grocery store (Kosher or spice section)
- water in a spray bottle

### Optional Ingredients

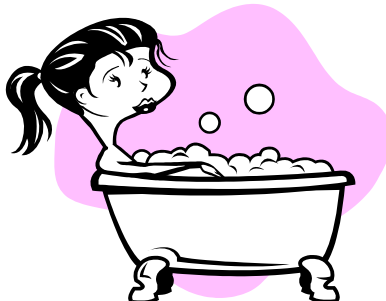
- moisturizing oil: 1 - 3 tsp. massage, almond, olive oil, etc.
- liquid food colour: 5 - 20 drops until you get to the desired colour
- fragrance or essential oil: ½ - 1 tsp. (make sure they are skin safe!); lavender, vanilla, orange, etc. all work well.

### Supplies

- large, wide mixing bowl
- plastic container for emergency mix
- 2 piece ornament molds or plastic soap molds
- surgical gloves
- plastic bags, ribbon, labels

### Directions

1. Mix 2 cups baking soda and 1 cup citric acid in a bowl until they're combined.
2. In the plastic container, combine a second batch with 2/3 cup baking soda and 1/3 cup citric acid as an emergency mix, to use if necessary.
3. Spray small amounts of water into your dry mixture until you get the right consistency. It should be thick, soft and slightly damp and clump in your hand. Don't get it too wet because the mixture gets wetter over time, and water starts the dissolving process.



4. When your bath bombs are the right consistency, it will be easy to mold and unmold them. Do this right away and don't leave the mixture to sit because the water will evaporate and your bath bombs will crack.
5. Pack the mixture firmly into the mold. When you turn it upside down to unmold, the mixture will almost seem to drop away from the sides. It shouldn't stick to the mold. If it does, then it has too much water in it. Use your emergency dry batch, adding a bit at a time until you get to the right consistency. You can also mold by hand.
6. Place finished product in a plastic bag and tie off with a pretty bow, then label with the type of bath bomb that it is.





# PLANT A TREE

## How To Get Started

Trees play a vital role in the health of our environment. Trees provide homes and shade for many creatures, provide oxygen, remove carbon dioxide from the air, and produce food for humans and animals alike. Planting trees with your unit can be a valuable activity to help your local environment. Planting a tree can foster a sense of responsibility, conservation, and an appreciation for the natural world for your girls. Plus, it's always fun to get your hands dirty digging in the dirt!

Before planting trees, there are some important things to consider. It is suggested that you speak to a forestry resource person (e.g. municipal councillor, member of a local horticulture club, tree nursery staff, arborist, a landscape architect, someone from the BC Ministry of Forests, Lands and Natural Resource Operations, etc.) in your area to find out about specific details and requirements for planting trees in your area. We spoke with Erlene Amero (SVI Area Camp Adviser), and she

shared the tips and hints included here for tree planting with your unit.



## When Should I Plant?

The best time of year to plant trees is during their dormant season. The dormant season varies based on where you live, but is generally between November and March. It usually is best to wait for the snow and frost to melt before planting. Consult a naturalist or other forestry professional in your area that can help you choose the best time to plant your trees.

*Tip from Erlene:* If you are working with younger children, you may want to purchase a case of trees (usually under a hundred dollars for 100 trees depending on species), pot the trees and then plant later, when the weather is a little nicer.



## Where Should I Plant?

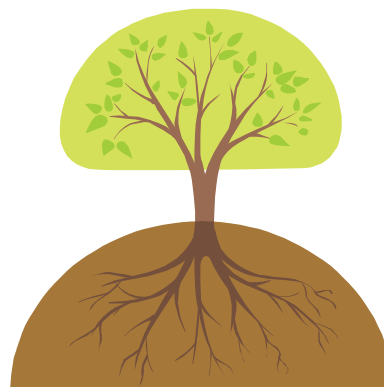
Your tree planting project could take place on a Girl Guides of Canada owned site (e.g. camp property, field at meeting hall), on public land owned by your city or town (e.g. public park) or a conservation area. It is important to identify who owns the land and to receive permission to plant trees there before you plan your tree planting event.

If planting on a Girl Guides of Canada property, check to see if the property has a tree planting program organized. If they do, an educated facilitator (i.e. someone who has already done all the research for tree planting in that area) will be able to facilitate a program and help girls to plant the trees. Check to see if they will provide the trees or if you need to order them yourself. If there is not a program in place, then you will have to work on a self-directed tree planting project.

Often public parks will require you to plant specific species of trees in specific areas of the park. At a public park you would probably be asked to plant only a few trees for your whole

unit. The nice thing about planting in public park is that it's close to home and the girls can watch the trees grow as they pass and visit the park on trips around town.

Conservation areas often have facilitated tree planting programs that your unit can join in on. In most cases the trees are purchased for the event and the ground is prepared so that all you have to do is put the trees into the ground. Planting in a conservation area is a good choice if you live close by, don't want to do a lot of research pre-event, and programs or nature activities to go along with the tree planting are offered.





## What Can I Plant?

Once you have decided where to plant your trees, you need to know which trees are appropriate to grow there (i.e. native species). Try and find out what type of soil is in the area you wish to plant. Certain types of trees do better in different types of soil. If you are taking part in a tree planting program with a facilitator, trees will most likely already be provided for your event. If you are doing a self-directed tree planting event or planting in a public park, you need to find out the exact species of trees that are native to that area and that will survive there.

The first step is to find out which

forestry zone you are going to be planting in. Information about forestry zones and native trees in BC can be found on the BC Ministry of Forests, Lands and Natural Resource Operations website. An important resource, "Tree Book: Learning to Recognize Trees in British Columbia" can be found here: <http://www.for.gov.bc.ca/hfd/library/documents/treebook/index.htm>. On the table of contents on the left of the screen, click on "**Biogeoclimatic Map of British Columbia**" to find out which trees grow best in your area. This book also provides an extensive guide on how to identify trees around the province.

## Where Can I Buy Trees To Plant?

Trees are available at both commercial nurseries and Silviculture farms. Silviculture refers to the practice of regulating growth, health and quality of forests. Commercial nurseries usually sell more expensive and exotic varieties of trees that are not suitable for the purposes of reforestation. Arbutus Grove Nursery, located on Vancouver Island, supplies various forestry companies across BC with seedlings. K&C Silviculture farm in Oliver, BC also sells seedlings for reforestation projects

## Tips From Erlene for Planting Day

- It is healthiest for the trees to come out of the freezer at the nursery and be placed in the ground within 48 hours. The more handling, the less likely the tree is to survive.
- Remember: Rangers and older Pathfinders will be able to follow directions and get the trees into the ground with some skill. Younger children often have great enthusiasm but lack the coordination to get the trees into the ground exactly as instructed. Be sure to have lots of adults to help younger girls.
- For some girls, it may be the first time they have ever dug a hole or held a beetle larvae or worm in their hands. Have patience and expect them to perform as children, not as professional tree planters.
- Don't try and move trees that are growing wild. Their root system is usually fairly large and the trees won't survive. Silviculture trees really do work best.
- Use browsing guards if you can get them, on fir trees. It reduces the deer munching. I've found it is hard to purchase browsing guards in small quantities and they can cost more than the trees.
- Expect 30 – 50% of trees not to survive the first three years. This is the natural attrition process. Other factors such as seasonal climate, drought, deer browse will all effect survival rates.



**"The best time to plant a tree was twenty years ago. The second best time is now."**

**—Anonymous**



Girl Guides of Canada-Guides du Canada, in partnership with TD Friends of the Environment Foundation, offers members a \$500 grant each year for tree planting projects.

You can find the application here: [https://www.girlguides.ca/GGC/Programs/Specialized\\_Programming/Tree\\_Planting/GGC/Programs/Specialized\\_Programming/Tree\\_Planting.aspx](https://www.girlguides.ca/GGC/Programs/Specialized_Programming/Tree_Planting/GGC/Programs/Specialized_Programming/Tree_Planting.aspx)

Once you have planted your tree(s), don't forget to log your actions on the National Service Project: Operation Earth Action website at:

<http://nsp.girlguides.ca/>

# Tree Planting & Forestry Resources

Southern Vancouver Island Area Girl Guides Area Camp Adviser, Erlene Amero is a fabulous resource for all things tree planting. She has developed a tree planting program at Camp Jubilee, an Area-owned camp, for girls of all ages. If you have further questions about tree planting she can be contacted by email at [svicampadvisor@gmail.com](mailto:svicampadvisor@gmail.com).

Girl Guides of Canada-Guides du Canada has some very useful planning resources available at <https://www.girlguides.ca/GGC/Programs/Specialized Programming/Tree Planting/GGC/Programs/Specialized Programming/Tree Planting.aspx>. Click on "Tree Planting Toolkit" for a step by step guide.

TD Planting Days website will help you locate tree planting projects in

your area.

<http://www.tdtreedays.com/en-ca>

EcoKids Website has some excellent information for kids on how to plant seedlings, why we should plant trees, great tips for your tree planting day, proper techniques on planting seedlings, and ways to take care of your tree in the years following tree planting day. [http://www.ecokids.ca/pub/eco\\_info/topics/climate/tree\\_planting/](http://www.ecokids.ca/pub/eco_info/topics/climate/tree_planting/)

Association of BC Forest Professionals students page <http://www.abcfp.ca/students/default.htm>. Forestry education information and lesson plans for students in elementary through high school.

Canadian Women in Timber provides an activity book for children in grades K-5 to learn about forestry. <http://canadianwomenintimber.com/Education.html>

## Hug a Tree Game

Play this outdoors in an area with a variety of trees.

### Supplies

- blindfold (optional)

### Directions

1. Girls are partnered up.
2. Partner A closes her eyes or is blindfolded then Partner B leads her to a nearby tree.
3. Partner A uses her hands to feel the tree and get a sense of the

characteristics of that tree (i.e. is the bark rough or smooth? Is the tree wide, or thin?).

4. After a couple minutes of blindfolded exploration, Partner B leads Partner A back to the starting point.
5. At that time, Partner A removes her blindfold and tries to identify the tree she was feeling.
6. Have the players switch roles and explore a new tree. A fun challenge for all ages!

## Four Trees Game

Play outdoors in an area that has at least four trees large enough for a few girls to hide behind.

### Directions

1. Name the trees #1, 2, 3, 4 or by the type of tree (i.e. douglas fir, maple, cedar, etc).
2. Play the game as you would play Four Corners using the trees as the "corners".
3. One girl stands in the middle of the playing area with her eyes

closed and counts to 10 (count higher if trees are spaced a fair distance apart).

4. As she is counting, the rest of the group runs to hide behind one of the designated trees.
5. The counter chooses one of the trees, keeping her eyes closed. Whoever is hiding behind that tree comes to sit in the middle.
6. If the counter calls a tree where no one is hiding, everyone who is out can go back into the game.

## Make Paper

Making your own paper is a great way to discuss the importance of recycling and how this can help the environment. There are many resources online for methods of making your own paper.

### Supplies

- small strips of recycled paper (e.g. newspaper, printer paper, etc)
- a blender
- wire hanger
- pair of pantyhose
- 2 tbsp of white glue
- water
- insect screen or strainer (optional)
- a large basin or tube filled with 4 inches of water.

### Directions

1. Use the hanger to make a frame. Bend the hanger into a rectangle or square shape and stretch one leg of the pantyhose over the hanger until tight and flat.
2. Place torn pieces of paper and water in the blender. Blend until you have a mushy ball (blend until you can't see the paper anymore, and then for 2 minutes after that).
3. Place 2 tbsp. of white glue and the paper pulp you just blended, into the water basin and mix well using your hands.
4. Dip your wire frame to the bottom of the basin and slowly pull up, letting all the water drain out as you bring the frame out of the basin (allow at least one minute to drain).
5. Hang your frame somewhere to dry. Once dry you can carefully peel off the paper.

Extension to this activity: add flower seeds to the paper as it is drying. Use this seed-infused paper as a greeting card that can be planted in the garden and will grow flowers for the lucky recipient!





# BE AN ENERGY DETECTIVE

"Be an Energy Detective" is one of the action activities in Operation Earth Action. This activity includes two versions of an energy audit worksheet on the National Service Project website (<http://nsp.girlguides.ca/energy.aspx>) for you to print and either send home with the girls, or audit your meeting space. But you can do so much more with this activity! In this section you will find an alternate version of an energy audit worksheet, as well as some energy awareness activities you can do with your girls, and links to numerous activity books online.

## Energy Jeopardy

*Note: an alternate Energy Jeopardy game can be found on the NEED Project website at <http://needproject.membershipsoftware.org/energysources>.*

Divide the girls into teams (could be by patrol – about 6 girls per team works well) and give each team some sort of buzzer – could be a party horn, could be a bell, could be something else – be creative!

There are many ways you could set up your Jeopardy game. You could use a board with a grid of envelopes attached to it, the categories listed across the top and the point values for the questions written on each envelope, or use file folders with the point value written on the outside of the folder, and the "answer" written on a piece of paper inside (you can have the "question" written on the reverse side of the paper, but only have the answer showing when you lift up the folder). Or just write the categories and point values on a chalk board with the Guider holding the list of questions. (Example on Next Page). One team is randomly selected to go

## Energy Icebreaker Name Game

The NEED Project (National Energy Education Development Project) has some fabulous resources online that may be reproduced for non-commercial education purposes. The following activity was taken from the Energy Games and Icebreakers booklet, which can be downloaded from <http://needproject.membershipsoftware.org/energysources>. This is just one example of the many activities available from this website – it is highly recommended that you take a look at their resources!

Start the game by sitting in a circle. You could divide the group into two smaller groups (i.e. groups of 10-12) if desired.

1. The group leader should instruct the students that they will be choosing new last names. Their new last names should begin with the same letter as their first names and be energy-related—a source of energy, an energy-consuming or -producing device, or energy term. For example: Brenda Biomass, Martha Microwave, Gina Generator, etc. Tell the members of the group that no relatives will be allowed in the game – there can't be both Brenda and Barbara Biomass.

2. Before you get started, ask if anyone in the group is having a problem thinking of an energy last name. For those who are, ask them to tell the group their first names. Then have the group brainstorm several last names for them.
3. The group leader begins by saying, "Hi, my name is..." and then her first name, followed by her new energy last name. The person to the left of the leader says the first person's first and last name, and then her own new energy name. The third person continues by giving the first two names, then her own energy name. This continues until the final person, sitting to the right of the group leader, gives everyone's name and then her own name.
4. If, during the game, someone in the group has a problem remembering a person's first or last name, have members of the group give that person a hint. For example: If the person's name is Tammy Toaster, someone in the group could say, "You put your bread in it in the morning." If the person's name is Petra Petroleum, a group member could say, "You make gasoline from it."

first. That team chooses a category and a point value. (For example "Saving Energy for 100 points.")

A Guider reads the clue out loud as an answer. (For example "We need to turn these off when we're not using them.")

Any player on any team can now sound the "buzzer" to attempt to answer the question. You must instruct the girls that they are NOT to buzz before you finish reading the question!

Another Guider identifies who sounded the buzzer first, and selects that girl to ask the question related to the answer read out loud. Remember, she must form her response as a question! (For example "What are lights or appliances?") Teams cannot discuss the answer in advance. If the response is correct, that team earns the number of points listed and chooses the next category and point value.

If the

Continued on page 18



# Energy Jeopardy Continued....

answer is incorrect, the number of points on the card is deducted from their team score, and another team may buzz and respond. If no team can respond correctly, the Guider reads the correct response and the team who chose the question may choose again.

Continue playing until all category point values have been used up. Have some small trinkets available for the winning team – something energy-related would be perfect!

Saving Energy	Renewable Energy	Non-Renewable Energy	Energy Terms
100	100	100	100
200	200	200	200
300	300	300	300
400	400	400	400
500	500	500	500

## Jeopardy Questions

### Category: Saving Energy

- A – We need to turn these off when we're not using them.  
 Q – What are lights or appliances?  
 A – This type of light bulb uses much less energy than an incandescent bulb.  
 Q – What is a compact fluorescent bulb?  
 A – These two appliances should only run when fully loaded.  
 Q – What are a dishwasher and a washing machine?  
 A – We need to adjust the setting on this for day and night.  
 Q – What is a thermostat?  
 A – This should be between your front door and the door frame.  
 Q – What is weather stripping?



### Category: Renewable Energy

- A – Energy from the sun.  
 Q – What is solar energy?  
 A – Energy from water.  
 Q – What is hydroelectric energy?  
 A – This machine collects and stores wind energy.  
 Q – What is a windmill/wind turbine?  
 A – Four sources of renewable energy.  
 Q – What are sun, wind, water, biomass (i.e. wood, corn, etc) or geothermal.  
 A – These collect and store energy from the sun.  
 Q – What are solar panels?

### Category – Non-renewable Energy

- A – A black material that looks like rock.  
 Q – What is coal?  
 A – A fossil fuel that comes from within the Earth and is pumped out.  
 Q – What is oil or what is petroleum?  
 A – A fossil fuel that is lighter than air and has no odour.  
 Q – What is natural gas?  
 A – We use these three fossil fuel sources of energy the most.  
 Q – What are oil, natural gas and coal?  
 A – A type of energy that uses Uranium.  
 Q – What is nuclear energy?

### Category: Energy Terms

- A – Resources that come from nature.  
 Q – What are natural resources?  
 A – Resources that can't be replaced.  
 Q – What are non-renewable resources?  
 A – Resources that can be replaced.  
 Q – What are renewable resources?  
 A – Resources that are created from plants and animals that died millions of years ago.  
 Q – What are fossil fuels?  
 A – A word which means we will use less energy.  
 Q – What is conservation?



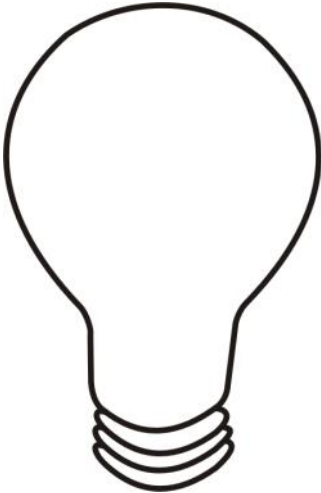
# is an Energy Detective

Name \_\_\_\_\_

## Lights

An incandescent bulb uses about 4x as much energy as a CFL light, and 10x as much energy as an LED light!

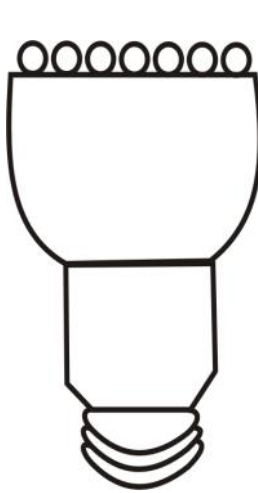
Incandescent



Compact Fluorescent (CFL)



Light Emitting Diodes (LED)

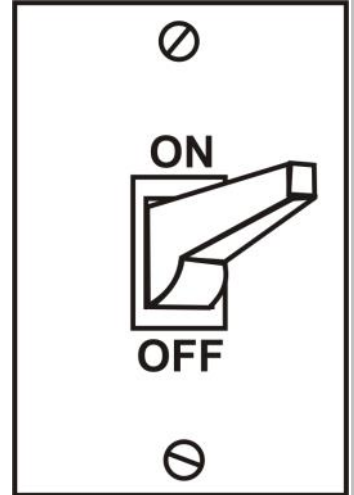


Walk around your house and look at the light bulbs. For every light make a mark inside the type of light bulb used. When you have finished, count how many of each type of light bulb you have. Circle the kind you have most of.

Are there lights on where they aren't needed?

Above the "ON" mark how many rooms have lights on with nobody in them.

Below the "OFF" mark how many rooms have the lights off.



*\*Don't mark rooms where the lights are being used by somebody!*

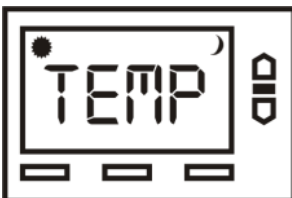
## Appliances

Look for the EnerGuide label or ENERGY STAR symbol on your appliances. Place a checkmark in the star below for each appliance that has one of these energy conservation markings.



Make: \_\_\_\_\_  
Model: \_\_\_\_\_  
Age: \_\_\_\_\_

## Heating & Cooling



You can save energy by reducing your furnace or air conditioner usage when you aren't home, or when you are asleep. If you have a programmable thermostat, you automatically save energy by setting the temperature to change during the day and night. If you have a programmable thermostat, how is it set?

Time	Temperature Setting

# Water Conservation



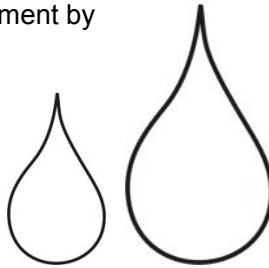
By using a low flow shower head, you don't just save water (which is important, too!), but you also save energy because you don't need to heat up as much water.

Do you have low flow shower heads? If you do, draw a smile on the person in the shower. If you don't have low flow shower heads, draw a frown.

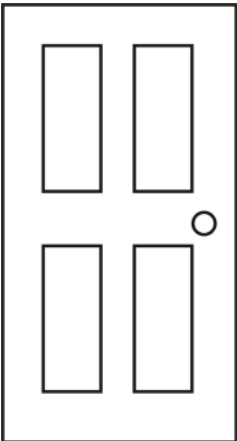


Low flow toilets help the environment by using less water per flush, thus conserving water!

For every low flow toilet in your home, put a check in the small water droplet. For every traditional toilet, put a check in the large water droplet.



# Windows & Doors



From inside your house, check all of your exterior doors. With the door closed, do you feel a draft from outside? If there is a draft, that means you are losing heat around your doors, and wasting energy!

If you do not feel a draft, put a checkmark in the happy face. If you do feel a draft, put a checkmark in the sad face.



Houses have a lot more exterior windows than doors! Some things you can look at with your windows are the weather stripping around them (are there drafts?), and the type of window (single pane = one piece of glass, double pane = two layers of glass, triple pane = three layers of glass). The more layers of glass a window has, the better insulated it is.



Check your windows. If you do not feel a draft, put a checkmark in the happy face. If you do feel a draft, put a checkmark in the sad face.

# Energy Savings

When you have completed your audit, suggest some ways that you could reduce energy usage.

**Lights:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Appliances:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Heating & Cooling:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Water Conservation:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Windows & Doors:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



---

## Renewable vs. Non-Renewable Energy

Circle the renewable sources of energy.

“Renewable” energy means that the energy source is naturally replaced, every day.



**Solar Energy**



**Coal**



**Oil**



**Hydro Power (Dams)**



**Wood**



**Natural Gas**



**Geothermal  
(Heat From the Earth)**



**Nuclear Power  
(Power Created  
from a Nuclear  
Reaction)**



**Wind Power**

# The Lorax

Tie both the Energy Detective and Tree Planting activities together with "The Lorax" by Dr. Seuss. Read the book or watch it being read online <http://youtu.be/soRbNIPbHEo> or <http://youtu.be/uqbX3jMN1N4>.

The 1972 movie is also available online <http://youtu.be/ZA4k2E0ZzTk> or you could rent the 2012 Lorax movie for your unit.

Follow up by completing the Lorax Energy Star Activity book at <http://www.energystar.gov/ia/partners/publications/pubdocs/Lorax%20Activity%20Book%206%20pages.pdf> and the Energy Star Checklist at [http://www.energystar.gov/ia/partners/publications/pubdocs/LORAX\\_ENERGY%20STAR\\_Poster.pdf](http://www.energystar.gov/ia/partners/publications/pubdocs/LORAX_ENERGY%20STAR_Poster.pdf)

Write a letter to Mother Earth saying how you will protect her. [http://www.seussville.com/Educators/lorax\\_classroom/assets/downloads/SLM\\_Lorax\\_WebUpdates\\_ActSht\\_Earth.pdf](http://www.seussville.com/Educators/lorax_classroom/assets/downloads/SLM_Lorax_WebUpdates_ActSht_Earth.pdf)

Finally, make your own Lorax to help remember his message. Search online for Lorax craft ideas, or use this one.



## Supplies

- orange paper cup
- yellow pipe cleaner for mustache and eyebrows
- orange pipe cleaner for arms
- 2 more colours of pipe cleaner for tree trunk
- 2 googly eyes
- feathers
- orange silk flower
- small orange pom-pom
- scissors to cut pipe cleaners
- tacky glue

## Directions

1. Start with the cup upside down. Poke the stem of the flower through the base of the cup.
2. Glue the eyes and nose (pom-pom) in place.
3. Shape a yellow mustache using pipe cleaner and glue it on below the nose.
4. Shape two eyebrows using pipe cleaner, and glue them above the eyes.
5. Poke two holes in the cup, and feed an orange pipe cleaner through to create arms. Trim to length, and shape as desired.
6. Twist two colours of pipe cleaners together to make a tree trunk.
7. Holding the shafts of several feathers together, twist one end of the tree trunk tightly around the feather to secure them in place.
8. Attach one arm's hand to the tree.



## Online Energy Activity Booklets and Resources

Girl Guides of Canada National Service Project Energy Detective <http://nsp.girlguides.ca/energy.aspx>

National Energy Education Development Project (NEED) Curriculum Resources <http://needproject.membershipsoftware.org/curriculum>

Energy Hog Resources <http://energyhog.org/adult/resources/>

APOGEE Electric & Gas Company Energy Education <http://c03.apogee.net/contentplayer/?coursetype=kids&utilityid=demo&id=16163>

EcoKids Get Energy Wise, includes links to printable activities, such as a school energy audit, an energy scramble and Fossil Fuel activities. Sign up for a free Teacher's account for access to more resources [http://www.ecokids.ca/pub/eco\\_info/topics/energy/intro/index.cfm](http://www.ecokids.ca/pub/eco_info/topics/energy/intro/index.cfm)

Natural Resources Canada - Energy and the Environment activity booklets <https://www.nrcan.gc.ca/energy/efficiency/kidsclub/7811>

Alliant Energy – Energy Explorer Activity Book, and more <http://www.alliantenergykids.com/FunandGames/FunStufftoPrint/>

Energy Star Kids activities [http://www.energystar.gov/index.cfm?c=kids.kids\\_index](http://www.energystar.gov/index.cfm?c=kids.kids_index)

US Department of Energy activities <http://www1.eere.energy.gov/education/lessonplans/>





# SUPPORTING ANIMAL HABITATS

What can girls and Guiders do to preserve and help our natural habitats? Try out some of these activities and projects to make an impact – we can take action for a better world!

## “Insect” Jar Birdfeeder

Build a fun birdfeeder as a decorative piece for the garden.

### Supplies

- 1 m wire
- 3 m wire
- pair of pliers
- glass jar
- wild bird seeds
- epoxy such as J-B Weld (optional)
- 2 washers (optional)



### Directions

1. Wash and clean out a glass jar. Dry with a hand towel.
2. Cut a piece of wire that is 3 m in length. Wrap the wire around the glass jar using a pair of pliers. Twist the wire to make the desired design. Use the last 10-15 cm of the wire to make the hanger of the birdfeeder.
3. Cut another piece of wire that is 1 m in length. This will be the wings

- of the “insect” birdfeeder. Secure this wire to the other wire by looping it around it. Twist the second piece of wire around itself to form the wings.
4. You may wish to add some eyes to the “insect” by using two washers. Use epoxy to attach the washers to the wire.
5. Fill the glass jar birdfeeder with some wild bird seeds and hang the birdfeeder on the branch of a tree in the garden.

## Peanut Butter Jar Birdfeeder

Make a birdfeeder using a plastic container, such as a peanut butter jar.

### Supplies

- large plastic peanut butter jar
- drill
- pair of scissors
- wild bird seeds
- permanent marker
- wooden dowel (15 cm in length)
- 1 piece of twine (15 cm in length)



### Directions

1. Wash and clean a plastic peanut butter jar and lid. Dry with a hand towel.

2. Drill a hole through the center of the lid.
3. Use a pair of scissors to cut a piece of twine that is about 15 cm in length.
4. Feed the two ends of the string through the hole in the lid. Make a knot with the two ends of the string on the inside of the lid.
5. Use a ruler and measure 4 cm from the bottom of the jar. Use a permanent marker and draw a dot on the jar. Draw another dot directly across from the first hole. Make sure it is at the same height as the first hole.
6. Use a drill to make two holes at the two dots. The diameter of the holes should be big enough for a dowel to fit through them.
7. Use a pair of scissors to cut a 5-6 cm wide circle that is about 2-3 cm above one of the small holes

## Tray Birdfeeder

Transform a wooden craft tray into a functional birdfeeder for the garden.

### Supplies

- wooden craft tray
- drill
- pair of scissors
- wild bird seeds
- 2 pieces of twine

### Directions

1. Use a wooden craft tray that you no longer use.
2. Drill a hole at each of the four corners of the tray.
3. Use a pair of scissors to cut 2 pieces of twine that are 30 cm in length.
4. Take one end of the first piece of twine and feed it through one hole. Tie a knot to secure the twine to the tray.
5. Take the other end of the same piece of twine and feed it through the hole that is adjacent to it on the same side of the tray. Tie a knot to secure the twine to the tray.
6. Do the same with the second piece of twine on the other side of the tray.
7. Fill the tray with some wild bird seeds and hang on tree branch.



- in the jar.
8. Feed the dowel through the first small hole in the jar and then through the second small hole that is directly across from it.
9. Add some wild bird seeds to the jar.
10. Screw on the lid.
11. Hang the jar, by the string, on a branch of a tree in the garden.



## Butterfly Feeder

Build a beautiful butterfly feeder to encourage insect pollinators, like butterflies, to visit your garden in the spring.

### Supplies

- baby food jar
- drill
- sponge
- teaspoons
- sauce pan
- double sided tape
- strong string or twine
- colourful stickers or ribbon
- brightly coloured decorative paper
- butterfly food: 10 teaspoons of water for every 1 teaspoon of sugar



### Directions

1. To make food for butterflies, add 10 teaspoons of water for every 1 teaspoon of sugar. The amount that is needed will depend on the size of the baby food jar that is used.
2. Add the sugar to the water in a sauce pan. Mix the contents until the sugar is dissolved.
3. Bring the sugar solution to a boil on the stove. Once the solution starts to boil, remove from the heat and set aside to allow the solution to cool to room temperature.
4. Remove all labels on the outside of the baby food jar.
5. Wash out the jar and lid with soap. Dry with a hand towel.
6. Use a drill to make a small hole in the center of the lid. The hole should be big enough for a small piece of sponge to fit through. The sponge should be big enough so that the butterfly food solution does not drip out of the hole in the lid.
7. Use a pair of scissors to cut a piece of sponge. Insert the piece

of sponge through the hole in the lid so that about 1-2 cm of the sponge is sticking out from the top of the lid.

8. To decorate the baby food jar, use colourful stickers, fancy ribbons or brightly coloured decorative paper. The bright colours will attract pollinators to the feeder.
9. Use some strong colourful string or twine and tie it to the jar. Wrap the string around the neck of the jar, just below the lid, three times.
10. Cut two more pieces of string about 30 cm long. Take one end and loop it through the piece of string that is around the neck of the jar. Take the other end and tie it to the opposite side of the jar. Make several knots to secure the string to the jar.
11. Repeat these steps with the other piece of string, making sure that it is perpendicular to the first piece of string.
12. Take all four strings and tie them together at the base of the jar. Tie all four strings together again near the end of the strings at two different locations. This will create a loop to hang the birdfeeder.
13. Remove the lid and pour the butterfly sugar solution into the jar. Secure the lid to the jar. Turn the jar upside down. There should be no leaks. If it is leaking, replace the sponge with a bigger piece.
14. Hang the feeder about 15 cm above some flowers or about 1 m down from a tree branch near a flower bed during the summer months (June to September).

### Suggestions

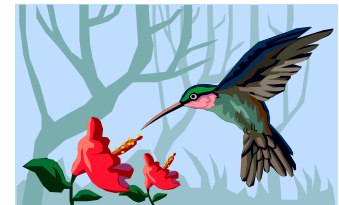
- If you do not have a drill, you can use a hammer and a nail to punch the holes through the lid.
- Use large baby food jars, mason jars, or spaghetti sauce jars for the feeders.



## Plastic Bottle Hummingbird Feeder

### Supplies

- empty pop or water bottle
- zap strap
- twine
- scissors or exacto knife
- disposable sandwich container (preferably with red lid such as Glad),
- permanent marker
- hole punch
- hammer and nail
- hummingbird food: 1 part sugar to 4 parts boiled and cooled water



### Directions

1. Remove lid from water bottle and place opening on container lid.
2. Trace outline of water bottle opening on lid.
3. Cut the traced circle out with an exacto knife.
4. Hole punch 4 or 6 holes spread around the surface of the lid, closer to the edge--these will be the feeding holes.
5. Fit lid onto bottle by slipping hole onto the neck.
6. Screw lid of bottle back on. Punch a hole in the bottle cap with the hammer and nail.
7. Remove lid to fill bottle with hummingbird food. Put lid back on.
8. Secure twine as a hanger by tying zap strap to bottom third of bottle and attaching twine before tightening strap.
9. Attach bottom of container by snapping onto lid and turn upside down to let water fill container.
10. And your feeder is ready to go! Red stickers or sharpie drawings on the bottle may also help attract the birds.



## Glass Bottle Hummingbird Feeder

Make a hummingbird feeder to attract some cute visitors to the garden.

### Supplies

- sponge
- paint brush
- pair of pliers
- paper plate for paint
- glass bottle with cap
- masking or painter's tape
- colourful paint for multi-surfaces
- 2 pieces of 16 gauge wire (about 1 m in length)
- hummingbird food: 1 part sugar to 4 parts boiled and cooled water

### Directions

1. Remove all labels from a glass bottle.
2. Wash the glass bottle with soap and let the bottle air dry.
3. Use masking tape or painter's tape to create striped design on the bottle.
4. Use a paint brush to add colourful paint onto the glass surface of the bottle. Bright colours, especially red, will attract hummingbirds to the feeder. Set painted bottle aside and let the paint dry completely overnight.
5. Place the bottle on its side.
6. Take one piece of wire and place it under the bottle. Choose a place that is near the bottom half of the bottle.
7. Take the second piece of wire and place it on top of the bottle,

directly above the first piece of wire.

8. Attach the two pieces of wire by twisting them together on both sides of the bottle. A pair of pliers may make the twisting easier. Continue to do this until there is about 10 cm left.
9. Take all four wires and twist the last 10 cm into a loop, which will be used as the hanger for the feeder.
10. Use a drill to make a small hole in the center of the lid. The hole should be big enough for a small piece of sponge to fit through. The sponge should be big enough so that the hummingbird food solution does not drip out of the hole in the lid.
11. Use a pair of scissors to cut a piece of sponge. Insert the piece of sponge through the hole in the lid so that about 1-2 cm of the sponge is sticking out from the top of the lid.
12. Pour the hummingbird sugar solution into the bottle. Secure the lid on the bottle.
13. Hang the feeder upside down in the garden on a tree branch near some flowers.



## Winter Feral Cat Shelter

Are you an urban girl or Guider? Wondering how to help animals when you live in the city? Try having the girls collaborate on a feral cat shelter used by cats in the winter! You may not see them, but there are many cats out there without a true home and they need our help.

First of all, make some kind of shelter- while these instructions are specific, if you cannot do this exact shelter, do something! Use a cardboard box, a plastic trash can turned on its side, or some kind of tub; give it some insulating properties with newspaper, straw, insulation batting but do not use blankets or towels as they retain moisture.

Place the shelter in an inconspicuous area: behind a dumpster, between buildings, at the edge of a green area – cats are naturally suspicious creatures and crave protected spots. Cats can go awhile with little food but cold winter conditions can have them succumb to hypothermia or aggravate some illnesses such as respiratory distress.



## Styrofoam Cat Shelter

### Supplies

- styrofoam cooler (the kind used for ice in the summertime)
- scissors or knife
- hay, shredded newspaper, packing peanuts or Mylar blanket

### Directions

1. Turn the cooler on its side and make a hole about 5 inches by 5 inches to one side of the cooler and a few inches above the ground to avoid water coming in.
2. Use hay or shredded newspaper to allow the cat to burrow in. If you have it, use those \$1 mylar blankets to line the inside. Styrofoam peanuts can also be used to help insulate.

## Cardboard Cat Home

### Supplies

- two boxes, one smaller than the other but only by an inch or two all the way round.
- garbage bag
- duct tape
- shredded newspaper or insulation
- scissors or knife

### Directions

1. Cover the outer (larger) box with garbage bag plastic, taping it in

place with duct tape.

2. Place the second box inside and stuff shredded newspaper or insulation between the two boxes.
3. Cut an opening through the same flap of both boxes above ground level.
4. Line the bottom with shredded newspaper.



## Ladybug House: Log Option

What girls and gardeners don't love ladybirds? Build a house for them and attract them to your garden or field area by mixing up some water, honey and brewer's yeast and spreading the mixture over some of the surfaces of your garden.

### Supplies

- scrap piece of plywood (and a saw to cut it with)
- small wood logs (the circumference of a water bottle, and 6-12 inches long)
- hammer & nails or wire
- bamboo cane
- drill
- twigs
- wire

### Directions

1. Nail and/or wire the logs together to form a triangle or rough square.
2. Cut the plywood to the shape you have made and nail it to the back of your logs.
3. Take bamboo cane or other hollow tubing and cut to the depth of the logs as well as cutting to that length some other log pieces which are then drilled with holes at least 5 mm in diameter.
4. Completely fill the space of your shape (you can also use twigs), making sure everything is jammed in tight.
5. Use a wire to hang your ladybird house in a direction facing the sun and near the area you want the ladybirds to congregate.

## Bumblebee Nest

Everyone thinks of bees living in hives, but many bees are more solitary than that, living with just a few others; one example are ground bees, which are important pollinating bees. So create a bee-friendly area in your garden by making a bumblebee nest.



### Supplies

- terra cotta pot
- moss or dry grass
- shovel

### Directions

1. Fill the pot loosely with moss or dry grass.
2. Dig a shallow hole near a bush that has the sun on it at least half the day.
3. Place the pot upside down, with the bottom hole towards the sky, and bury half of the pot below the surface.

Find more bumblebee nest ideas online: <https://www.google.ca/#q=homemade+bumblebee+nest>.



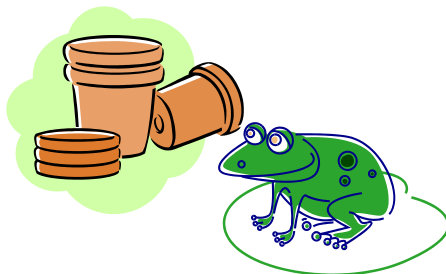
## Toad Abode

Toads are great for kids to watch and gardens will thrive with these bug-eaters living in them. But toads are happiest when able to burrow and have their needs met, such as water and food, close by.

So help yourself and the toad (or frog) by creating the perfect toad abode.

### Supplies

- large terra cotta pot, slit in half
- trowel
- sod or moss



## Ladybug House: Bamboo Pot Option

### Supplies

- terra cotta pot
- decorating supplies (paint, stickers, markers, etc)
- bamboo canes
- straw
- twine



### Directions

1. Decorate the outside of the pot in any way desired.
2. Fill about half of the pot with straw.
3. Take a small bundle of bamboo canes or other hollow reeds and tie them tightly with twine.
4. Place the bamboo bundle into the pot, with the open ends up.
5. Fill around the bamboo with more straw.
6. Place the pot into the garden.

Note: It is possible to buy what are called nesting tubes – hard brown cardboard tubes sold in gardening stores.

### Directions

1. If your pot is not split, you will need to do that first. You can use an electric tile saw or a hacksaw. If using a hacksaw, submerge the pot in a bucket of water and slowly saw through the pot (while it is in the water).
2. Use a trowel to dig a narrow shallow hole close to a water supply (damp spots are great) and an area that attracts bugs (outdoor lighting, plants, etc.).
3. Put the flowerpot half down into the hole with the intact side up, creating a shelter with ample opportunity to burrow.
4. Place some sod or moss over the pot to help keep it cool and less exposed.

## Insect Bath

Making animal habitats is more than their home base – without food or water animals cannot thrive! So encourage bees and other small flying insects, such as ladybugs, butterflies and even wasps, to come visit by giving them a place to land. Conventional birdbaths don't work on their own as the insects need a place to land (the bugs are like helicopters, not float planes!).

### Supplies

- shallow bowls or plates
- small rocks and pebbles

### Directions

1. Create bee baths by placing shallow bowls or plates at ground level near plants.
2. Add small rocks and pebbles to the water to act as landing pads so the insects don't crash into the water.
3. Check on the bee bath daily, replenishing or replacing the water so that it is fresh.



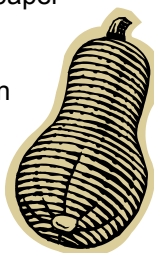
## Gourd Birdhouse

There are lots of instructions for making wooden birdhouses! Why not teach the girls to use natural materials just as native North and South Americans did hundreds of years ago.

Dried gourds make wonderful birdhouses but be prepared to spend the Guiding year to see the final product.

### Supplies

- gourds, harvested in the fall, and left to dry until the spring
- warm, soapy water
- steel wool or sandpaper
- drill
- serrated knife
- long handled spoon
- oil-based primer
- polyurethane
- paint brushes
- twine



### Directions

1. Gourds should be harvested in the fall when the vine withers and then hung to dry in a dry warm spot for at least 4 to 6 months. Mould may begin to grow, but the gourds just need to be wiped

down with a disinfectant solution of 1 part bleach to 10 parts water. Only throw the gourd out if it softens or wrinkles. You'll know it's ready to become a birdhouse when you shake it and the seeds rattle!

2. Soak the gourd for 15 minutes in warm, soapy water and then scrape the outer skin and any remaining mold off. Use steel wool to smooth the exterior. The gourd can even be sanded.
3. With the help of adults, drill a hole of a suitable size for the bird you are trying to attract. Also, drill holes at the bottom for drainage and one at the top for securing twine to.
4. Clean the gourd out with a serrated knife to break up the contents, then a long handled spoon and some patience! It does not have to be completely clean.
5. Treat the gourd with oil-based primer and then polyurethane to seal it. Let dry and then hang.
6. No perches are needed as the birds are so precise in their flying they can land directly on the sill of the hole!

## Coconut Bird House

If the girls and Guiders do not have patience to wait for a gourd to dry, then try a coconut.

### Supplies

- coconut
- hacksaw
- drill
- twine

### Directions

1. Use a hacksaw to cut a hole into the side of the coconut and scoop out the meat and milk. It does not have to be completely clean as the birds will eat the coconut meat.
2. Drill drain holes and a hanging hole. If the hole is large, the birds may not nest in the coconut but it then can be used as a feeder.
3. Attach twine through the hanging hole.

## Shrinking Worlds Game

To help the girls understand the importance of maintaining animal habitats, play a game of Shrinking Worlds.

### Supplies

- carpet mats, foam mats or newspaper
- small objects: toothpicks, pebbles or beads
- method to play music

### Directions

1. Using a number of carpet mats, or foam mats, or newspaper - spread them throughout the playing area.
2. Scatter two different kinds of small objects such as toothpicks, pebbles, or beads throughout – these will represent food and water.
3. Instruct the girls that while the

music is playing they are creatures who must be out and about collecting food and water to live. When the music stops they must find shelter – the mats – before they are killed by their natural enemies.

4. After each round of music, remove a mat or two as well as some of the food and water, explaining to the girls that the disappearing objects are a result of humankind's encroachment upon the animal habitat and the effects of "civilization".
5. The girls will begin to find it harder and harder to fit all of them onto the mat or find food and water each time.
6. Explain that they are "dying" because their habitat is being lost. This is why it is so important to do our part and help our world be a place we can all live in.





# TRANSFORMING TRASH TO TREASURE

## Decoupage Tea Light Holders

Pretty as well as functional – even the youngest girls can do this craft.

### Supplies

- baby food jars
- pieces of coloured tissue (can be crinkled or torn - doesn't matter)
- white glue or Mod Podge
- tealight (regular or electric)
- ribbon
- foam brushes
- disposable containers

### Directions

1. Protect your work surface for easy clean up.
2. Pour white glue and mix with a little bit of water or pour Mod Podge into a disposable bowl or short plastic container.

3. Paint the jar liberally with the glue or Mod Podge.

4. Apply small pieces of tissue paper to the jar.

5. Reapply the glue over top of the tissue.

6. Too much glue on it? Doesn't matter – dries clear and looks great!

7. Place a tealight inside, a ribbon bow around the opening and voila!



Find many more baby food jar crafts online: <https://www.google.ca/#q=baby+food+jar+crafts>

## Juice Lid Wind Chimes

### Supplies

- frozen juice lids
- hammer & nail
- paint or glue and glitter
- fishing line or dental floss
- small stick

### Directions

1. Punch a hole through the top of the lids with a hammer and nail – let the girls do it with your help.
2. Paint or glue and glitter three or four juice lids.
3. Using fishing line or dental floss, attach them at varying heights to a small stick.
4. Hang outside.



Find many more juice lid crafts online: <https://www.google.ca/#q=juice+lid+crafts>

## Snowman Ornament

### Supplies

- frozen juice lid, pre-painted white
- hammer & nail
- permanent markers (Sharpies) or stickers
- 2 pom poms and a small piece of pipe cleaner, or a piece of black felt
- glue
- ribbon

### Directions

1. Punch a hole through the top of a lid with a hammer and nail – let the girls do it with your help.
2. Use Sharpies or stickers to create a snowman face –whatever is available.
3. Glue pom poms and a piece of pipe cleaner to make earmuffs or cut a piece of black felt to make a hat.
4. String a ribbon through the hole for hanging on the tree.



Girls and Guiders should be recycling as part of their promise to take action for a better world –the more we do to renew our resources and reduce garbage, the better our world will be.

But we can also sometimes create some great treasures from our everyday trash! Some great trash to treasure potentials are tin cans, tin juice lids, water bottles, baby food jars, laundry scoops, film canisters (though there are less and less of these), bottle caps – both plastic and metal, egg cartons, CDs, etc.

You can ask the girls to help you collect these or bring them in for a particular meeting or you can source out to friends and family.

## Juice Lid Photo Tree

### Supplies

- frozen juice lid
- individual photos of each girls
- circle punch
- scrapbook paper, wrapping paper or wallpaper
- glue
- ribbon
- tin can
- tree branch
- playdough

### Directions

1. Take photos of the girls earlier and use a circle punch to cut the photo to the size of the inside of the juice lid.
2. Use the same punch to punch out circles of pretty patterned scrapbook paper or wrapping paper or wallpaper and glue on the back side with the photo on the inside.
3. Ribbon can be attached as a trim around the circle or as a bow on top as well as a hanger.
4. The girls can create a photo tree by taking a branch and placing it in a tin can vase, cemented in by playdough, and hanging a number of photo ornaments.



## Cardboard Knot Book

Make knot books from cardboard cereal boxes. The knot books will be a great reference for the girls to reinforce how to tie knots.

### Supplies

- rope
- glue stick
- cereal box
- hot glue gun
- hole punch
- binder ring
- scissors
- double sided tape
- coloured cardstock
- take-out chopsticks
- permanent marker
- round lid for tracing

### Directions

1. Trace out 6 circles on the cereal box using a large round lid. The circles should be at least 8 cm in diameter. Use a pair of scissors to cut out the circles. Alternatively, use a large circle craft punch.
2. Trace and cut out another 12 circles using cardstock.

3. Cover up the writing on the cereal boxes by gluing the two pieces of cardstock on either side of the cereal box circles.
4. Punch a hole through the top of each circle, making sure all the holes are in the same place.
5. Make 5 different types of knots using rope and take-out chopsticks.
6. Use a hot glue gun to attach one knot to each cardboard circle.
7. Use a permanent marker to write the name of the knot below the rope. Alternatively, you could print out labels for the names using a computer and attach it to the cardboard circles using double sided tape.
8. Make a title for the knot book using one of the circles.
9. On the backside of each cardboard circle, write a description of how to tie the knot. You may choose to include pictures to show how to tie the



knot.

10. Assemble the knot book by placing all the cardboard circles through a binder ring.

### Suggestions

- An alternative to making knot books is to make a knot board using the back of a cereal box or the base of a heavy duty cardboard box. Display the different types of knots on the cardboard and write the names of the knots below the knots.
- You could use old shower curtain rings instead of binder rings to attach all the circles.



## Tin Can Craft Organizer

Make an organizer for felt pens, pencil crayons, glue sticks and other craft supplies for a unit meeting.

### Supplies

- nail
- paint
- hammer
- zap straps
- paintbrush
- 5 soup cans
- large coffee tin



### Directions

1. Clean and wash out large coffee tin and soup cans. Set aside to dry.
2. Use a paintbrush to cover the inside and outside of the coffee tin and soup cans with paint.
3. Take a nail and use a hammer to puncture a hole 1 cm from the top rim of each soup can.
4. Make 5 holes in the coffee tin can using the nail and hammer. The holes should be 1 cm from the rim of the tin.
5. Attach the soup cans to the coffee tin using zap straps.

6. Place felt pens, pencil crayons, scissors in the soup cans to keep thing organized at a unit meeting.

Find many more tin can crafts online:  
<https://www.google.ca/#q=tin+can+crafts>



## Laundry Scoop Mini Planter

### Supplies

- dry laundry detergent scoop
- paint, colourful duct tape or washi tape
- buttons or bottle caps
- glue
- soil
- seeds
- plant marker



### Directions

1. Paint or cover the laundry scoop with colourful tape (the sample is covered in tape).
2. Use two big old black buttons or bottle caps and create spoke center with sticker or paint. Glue to wheelbarrow scoop.
3. Add soil in with a few seeds and a plant marker.



Find many more laundry scoop crafts online: <https://www.google.ca/#q=laundry+scoop+crafts>

## Laundry Lid Sewing Pincushion

### Supplies

- liquid laundry detergent lid
- styrofoam ball
- a piece of fabric
- decorative buttons, rickrack, ribbon, etc.
- glue

### Directions

1. Cover the Styrofoam ball with the piece of fabric and then jam the ball down into the laundry lid with the open edge of the material on the bottom and with a rim of glue on the inside of the lid.

2. Decorate the lid with buttons, rickrack, ribbons, etc.

No laundry lids? Use gum containers instead!

The outside can be painted or have felt or material glued on or decoupage.

Find many more laundry lid crafts online: <https://www.google.ca/#q=laundry+lid+crafts>



## Egg Carton Snowman

Whether they are cardboard or styrofoam, egg cartons can be a gold mine for crafts for kids.

### Supplies

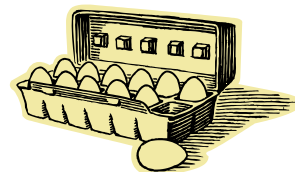
- white egg cartons, cut into sets of 3 cups
- cotton balls
- black hole punched paper
- small triangle piece of orange paper
- black paper hat
- ribbon
- glue



### Directions

1. Glue cotton balls into the cups.
2. Use black punch dots as the face and buttons and cut orange triangles for a nose.
3. Black hats can be cut from cardstock and glued on.
4. Use ribbon as a scarf.
5. A string can be added, if meant to be hung up.

Find many more egg carton crafts online: <https://www.google.ca/#q=egg+carton+crafts>



Don't forget to **LOG YOUR ACTIONS** by clicking the "Take Action" button for each section you complete, then submitting your actions using the Unit or Individual reporting buttons on the right side of the screen.

**TAKE ACTION!**

# PROGRAM CONNECTIONS

The <http://nsp.girlguides.ca/> website lists a number of program connections for each section of this challenge. We have repeated the connections from the website here for you. There may be more connections that you could apply to your program - use your best judgement!

Note: there are likely parts of some interest badges for Brownies and Guides which are covered, as well, which are not listed here.



## MAP YOUR MEAL

### Sparks

Being Healthy  
In My Community

### Brownies

Key to My Community  
Key to Active Living

### Guides

Beyond You

### Pathfinders

Getting Food on the Table

### Rangers

Environment, Outdoors and Camping



## PLEDGE

No program connections are listed on the website. However, if you are making water bottle holders or reusable bags in addition to the pledge, you will cover parts of the following.

### Sparks

In My Community

### Brownies

Key to I Can  
Key to the Living World  
Key to the Arts

### Guides

You in Guiding: Be Involved in Your Community  
Discovering You: Discover Your Creativity



## PLANT A TREE

### Sparks

Going Outside

### Brownies

Key to the Living World

### Guides

Beyond You

### Pathfinders

Our Environment

### Rangers

Environment, Outdoors and Camping

### Guides (continued)

Discovering You: Understand How to be Responsible  
Beyond You: Learn About Our Environment

### Pathfinders

Our Environment  
The Arts from A to Z

### Rangers

Environment, Outdoors and Camping  
Explore Your Creativity



## GREEN PRODUCTS

### Sparks

Exploring and Experimenting

### Brownies

Key to STEM

### Guides

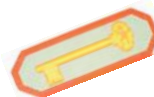
Beyond You

### Pathfinders

Our Environment

### Rangers

Environment, Outdoors and Camping



## ENERGY DETECTIVE

### Sparks

Exploring and Experimenting

### Brownies

Key to STEM

### Guides

Beyond You

### Pathfinders

Our Environment  
Everything Comes from STEM

### Rangers

Environment, Outdoors and Camping



## ANIMAL HABITATS

### Sparks

Going Outside

### Brownies

Key to the Living World

### Guides

Beyond You

### Pathfinders

Our Environment  
Creating a Garden

### Rangers

Environment, Outdoors and Camping



## TRASH TO TREASURE

### Sparks

In My Community

### Brownies

Key to My Community  
Key to the Living World

### Guides

Beyond You

### Pathfinders

Our Environment

### Rangers

Environment, Outdoors and Camping



# BC Program Committee Available Positions

The BC Program Committee is a busy and rewarding committee to be a part of. We create challenges, produce the FunFinder, provide trainings for Guiders and host Girl Events. We work as a team for many of our activities, but also have individual responsibilities based on our positions. We are currently looking to fill the following positions with dedicated Guiders who are passionate about the program.

## Healthy Lifestyles Specialist

### Purpose

To stimulate and promote Healthy Lifestyle activities through British Columbia in the delivery of the Girl Guides of Canada-Guides du Canada program for girls and Guiders.

### Qualifications

Be conversant with the programs for all branches of Guiding (or willing to learn!).

Be enthusiastic about active living, healthy lifestyles choices, self-esteem, etc. and have an understanding of current concerns and issues.

### Upcoming Tasks

Create a brand new BC Challenge - "Colour Me Healthy".

## Ranger Specialist

### Purpose

To stimulate and promote an active interest in the Girl Guides of Canada-Guides du Canada program, especially the Ranger program, throughout British Columbia.

### Qualifications

Be conversant with the Ranger program.

Be passionate about girls and Guiders having fun while completing the different levels of program.

Be able to relate well to both girls and adults.

Should have experience in working with Rangers.

## STEM Specialist

### Purpose

To stimulate and promote the use of Science, Technology, Engineering and Math activities through British Columbia in the delivery of the Girl Guides of Canada-Guides du Canada program for girls and Guiders.

### Qualifications

Be conversant with the programs for all branches of Guiding (or willing to learn!).

Be enthusiastic about STEM and have some work experience in at least one of the fields.

## Lones Coordinator

Although we do currently have the Lones Coordinator position filled, Susan Stephen has agreed to take on the position of Deputy Program Adviser, so we are looking for her replacement in the Lones position.

The Lones Branch of Guiding was established to enable girls to become Sparks, Brownies, Guides, Pathfinders and Rangers who, because of work, studies, illness or distance from an active Unit, are unable to attend meetings in the usual way.

Following is an excerpt from the Lones Coordinator position description.

### Purpose

To promote additional program ideas and activities for Lones.

To provide a way for the Lones Coordinator and all Lones to keep in touch with each other.

### Qualifications

Be conversant with the program for all branches of Guiding, being familiar with Lones.

**To apply for any of these positions, please contact [program@bc-girlguides.org](mailto:program@bc-girlguides.org)**

## BC Program Committee



Girl Guides of Canada Guides du Canada

### BC Program Adviser

Julie Thomson

### Girl Programs Specialist

Carla MacRae

### STEM Specialist

*Vacant*

### Lones Coordinator

Susan Stephen

### Environment Specialist

Van Chau

### Healthy Lifestyles Specialist

*Vacant*

### Arts Specialist

Barb Wilson

### Communications Liaison

Alyssa Robertson

### Ranger Specialist

*Vacant*

This publication may not be reproduced, in whole or in part, in any form, or by any means, electronic or mechanical, for use other than for Guiding activities within Canada, without the prior written permission of the BC Program Committee. [program@bc-girlguides.org](mailto:program@bc-girlguides.org)