

## My First Herb Garden

Taking herbs from seeds to using them in recipes

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## Summer Institute for Educators 2008

This document is the result of the author's participation in the BC Agriculture in the Classroom Foundation's Summer Institute for Educators in 2008. This third year level course in curriculum design (CUST 396) is offered every other year through the University of British Columbia's Faculty of Education's Office of External Programs.

In the summer of 2008 the Foundation partnered with the Teachers of Home Economics Specialist Association – THESA – and the Office of External Programs to make the Summer Institute a part of the Home Economics Education Diploma Program. This program consisted of 10 three credit courses that closely examined the Home Economics Curriculum IRP's and explored creative ways to address the learning outcomes.

Participants (30 educators from a variety of secondary disciplines and from many regions of the province) were based at Clarence Fulton Secondary in Vernon BC. As a result of visits to local farms and through intensive classroom work they developed a number of teaching strategies drawn from the agricultural, environmental, economic and nutritional concepts featured in the IRP's.

Participants taking the course for credit created teaching modules such as this to share with other educators around the province.

The BC Agriculture in the Classroom Foundation is supported by the BC Ministry of Agriculture and Lands as well as the agricultural community. Participants were sponsored for their farm tours as well as their meals (prepared by our Summer Institute chef using fresh and delicious local products).

Visit the BC Agriculture in the Classroom website at [www.atic.ca/bc](http://www.atic.ca/bc) for further information on this and our many other exciting programs or to order additional resources for your classroom.

Thank you for bringing agriculture to your classroom. We hope that you too will find it a great teaching tool to enhance your lessons.

[www.atic.ca/bc](http://www.atic.ca/bc)

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## Project Synopsis

Most students don't have gardens and have never grown anything on their own. Starting with a simple herb garden is a great way to introduce agriculture to students. In this project, students will be creating and maintaining their own herb garden as well as learning about herbs and gaining an appreciation for them and their commercial distribution. This project is geared towards a grade nine class but it can easily be modified for younger or older children by removing or adding various teaching activities. The one on-going teaching activity in this project is growing and maintaining an herb garden. The students will select three herbs to grow that will later be used in a recipe of their choice. This will help educate students of what it takes to actually grow and use their own food. They will gain an appreciation for growing produce and achieve a sense of accomplishment by successfully growing their own herbs. While they are growing their herbs, the other teaching activities they will be involved in will aid in understanding the use of herbs in cooking. Students will be able to discriminate and compare different herbs and understand and evaluate the difference between herbs and spices. Additionally, students will be involved in creating recipes, selecting and judging what herbs to use in certain recipes according to preference and taste. When they have successfully grown their herbs they will learn how to dry them and evaluate the differences between using fresh herbs vs. dried herbs in a recipe. In one teaching activity they will also evaluate and analyze the difference between different commercially marketed herbs. The last stage of this project will have the students visiting a local herb producer that will provide an opportunity for the students to see first hand the different careers involved with herbs and agriculture.

## Rationale for Herb Project

Due to the increase in urbanization in British Columbia today, students are becoming less and less familiar and knowledgeable about agriculture and the food system. "Too often their understanding of where food comes from is minimal" (Grow BC 6). Many students think that their food comes from Safeway or McDonalds and their vegetables come out of cans. Many really have no concept of the food system. This project is designed to introduce students to agriculture by having them grow their own herbs and having them experience and be part of their own small food system by taking their herbs from seed to eventually using their herbs in a recipe. This is a short food system and a simple farming project but at the end we will be looking at large herb producers and examining the larger herb producing food system. A Foods and Nutrition's classroom is a great place to teach children about agriculture and the food system and hopefully have them gain appreciation of where food comes from and how it grows.

This project on growing and using herbs is a great first step for lower grades (9) in Foods and Nutrition to get involved and interested in agriculture. The students will start by growing their own herbs and end by using them in a recipe. While creating, growing and caring for their herbs gardens in groups, they will "demonstrate organization and co-operation in partners and group work. (Food and Nutrition IRP 21) Some other reasons and benefits to growing gardens is "to improve self confidence, to improve life skills and to provide a teaching tool for growing cycle, health and hygiene (Somerset PhD 27). Having children grow their own food and seeing where it comes from will give them a sense of accomplishment as well as they will gain a larger appreciation and more of an understanding of agriculture.

At the end of the unit the students will be learning and examining herb agriculture at a larger scale. They will be researching and role playing jobs, companies and any other steps that is involved in the larger and longer food system for herbs. Many students are unaware that many herbs are grown and produced in BC; again they think they came from a spice jar or don't think about where the scent comes from in their essential oils. Discussing and analyzing these jobs and looking at all the steps that are involved from the herb starting at the farm to eventually ending at the consumer, will hopefully give the students some incite and appreciation of our local herb producer. Finally we will be taking a field trip to a local herb producer so the students can see first hand what is involved in growing and producing herbs at that level. This will also "identify food related occupations and careers" (Food and Nutrition IRP 21) in the local community.

This project is very hands-on and gives the students many opportunities to become critical thinkers in the small lessons while their herbs are growing. They will be identifying herbs and spices using their senses, as well as sampling and evaluating different herbs. They will be looking at the different ways herbs are marketed and critiquing the different styles. After their herbs are grown, they will learn to dry and store them and then use them in a recipe of their choice. This will give them experience with the end part of the food system, "the consumer".

The growing and producing herbs is the main focus of this unit. This gives the students hands-on opportunity to experience agriculture on a small scale. This will build their confidence as a gardener and peak their interest enough be an educated citizen and use these skills and knowledge in their future.



## My first herb garden – IRP Connections

**Subject:** Foods and Nutrition 9

**Topic:** growing and using herbs in cooking

**Objectives:** The students will...

- Gain appreciation for what it takes to produce food
- Gain a sense of accomplishment by producing their own food
- Understand the use of herbs in cooking
- Be able to discriminate and compare different herbs
- Understand and evaluate the difference between herbs and spices
- Become aware of local herb producers
- Evaluate the differences between different commercially marketed herbs
- Select and judge different herbs for certain recipes
- Judge the difference between dried and fresh herbs
- Create and maintain a herb garden
- Create dried herbs from fresh ones

**Prescribed learning outcomes:**

- A7 explain the functions of common ingredients used in food preparation
- B2 use a variety of cooking methods to prepare food
- B1 apply cooking principles to prepare healthy dishes and simple meals
- C4 identify and compare the ingredients and nutritional value of various commercial food products
- D1 describe factors that influence food choices
- D2 compare a variety of eating customs and etiquette
- E1 identify food-related occupations and careers

## Teaching Activity 1 – Planting And Growing Herbs

### Objectives:

- The students will create an herb garden. They will plant, grow and care for their herbs
- The students will gain a sense of accomplishment by successfully growing their own produce
- The students will develop confidence by caring for and growing produce
- Students will store fresh herbs properly in fridge
- Students will identify when herbs are ready to harvest for drying (drying will be done in another lesson)
- The student will value and appreciate what it takes to grow herbs

### Materials:

- Herbs seeds or seedling plants [lemon balm, parsley, basil, oregano, mint, cilantro, chive, thyme are good choices]
- Pots or containers that are at least 15 cm (6 inches) deep (if you have wide or long containers you can plant multiple herbs in one pot)
- Potting soil mix
- Trowels or large spoons
- Fertilizer
- Spray bottle for water, scissors,
- Window sills that get 5 hours a day
- Plastic bags
- Paper towels

### Procedure:

**Note:** you may want to have students make theme pots, e.g., a Pizza/Italian Seasoning Pot with parsley, oregano and basil OR a Salsa Pot with cilantro and parsley OR a Taboulli Pot with parsley and mint. If you have a place in the schoolyard where you could grow herbs outdoors you could plant in the spring and harvest in the fall. Some herbs are perennials and will continue to grow from year to year once they are started (e.g., chives, fennel, rosemary, oregano, sage, thyme).

#### 1) Have the students prepare pots and plant seeds or seedlings:

- **If planting seedlings:** Put a 5-6 cm (2-3 inch) layer of potting mix into the bottom of the container; position the herb plants in the container; finish filling in with the potting mix, firming gently around the plants; leave about 3 cm (1 inch) at the top of the container for watering; water sparingly, herbs don't like to sit in wet soil; feed once a month with a fertilizer labeled for use on edibles; allow the plants some time to acclimate. Once you see new growth, you can start harvesting be used fresh or for drying. Never trim more than 1/3 of the plants foliage.

- **If planting seeds:** fill containers with potting soil to within 2.5 cm (1 inch) of the rim; water the potting soil until it is thoroughly moist; gently sprinkle seeds over the surface; cover the seeds with 5 mm (1/4 inch) of potting soil; pat down gently and water lightly (a spray bottle works well for this); you can start to harvest when seedlings are 15 cm (6 inches) high. Never trim more than 1/3 of the plants foliage.

### Suggestion for assessment:

- Have students keep a journal describing the progress of their herbs. Set criteria with the class of what their daily journal must include.

### Teacher References

- [http://gardening.about.com/od/vegetablepatch/ht/window\\_herbs.htm](http://gardening.about.com/od/vegetablepatch/ht/window_herbs.htm)
- <http://video.about.com/gardening/Herb-Garden.htm>
- <http://www.growingherbs.org.uk>
- <http://www.kidsgardening.com/growingideas/projects/nov03/pg1.html>
- Example of a student journal is at this website

### Extensions for lesson:

- Make herb gardens as Mother's Day gifts.

## Teaching Activity 2 – Herbs And Spices: Using The Senses

### Objective:

- The students will be able to identify different herbs and spices
- The students will be able to explain the difference between a herb and a spice

### Materials:

- 5 or more different types of herbs in both fresh and dried state [Suggestions - parsley, basil, oregano, mint, thyme]
- 5 or more different spices, in both their whole and ground state [Suggestions - cinnamon, nutmeg, cloves, pepper, ginger]
- 10 or more trays – one for each herb and spice
- Name cards for each tray indicating the name of the herb or spice
- Copies of Handout #1 – Herbs and Spices for students to record their observations

### Procedure:

- Distribute Copies of Handout #1 and introduce the topic of using their senses to explore the topic of herbs and spices.
- Distribute the trays to groups of students and have them record their observations. Move the trays from group to group until all students have observed all the spices and herbs.
- Direct students to complete the conclusion questions. Then discuss the questions. Additional questions for discussion: Have they eaten foods that have been seasoned or flavoured with herbs? Give examples? Have they eaten foods that have been seasoned or flavoured with spices? Give examples. Can they name other herbs? How do they know they are herbs? Can they name other spices? How do they know they are spices? Did they realize that herb production provides an income for some BC farm families? Are there any herb farms in your area? Do they grow herbs at home?
- Summarize with the importance of knowing the flavour of herbs and spices in food preparation.

### Teacher References

A spice is a dried seed, fruit, root, or bark used for flavouring. Herbs are the leafy, green parts of a plant used for flavouring.

- <http://www.netcooks.com/HerbsSpices.html>

**Extensions for lesson:**

- prepare herb and spice seasoning mixes for use in the classroom or for gifts and sales.

Creole Seasoning Mix	Taco Seasoning	Italian Seasoning
20 ml salt	50 ml dried minced onion	80 ml dried oregano leaves
5 ml paprika	30 ml chili powder	80 ml dried basil leaves
15 ml garlic powder	10 ml paprika	10 ml garlic salt
10 ml pepper	10 ml dried red pepper flakes	15 ml dried minced onion
10 ml onion powder	7 ml dried oregano	15 ml dried minced garlic
5 ml dried thyme	2 ml dried marjoram	5 ml ground rosemary
5 ml dried marjoram	15 ml salt	
5 ml dried oregano	1 ml pepper	
5 ml cayenne pepper	15 ml garlic powder	
2 ml crushed red pepper flakes	5 ml ground cumin	

Combine ingredients. Mix well. Store in jars or small plastic ziplock bags.

## Handout #1 – Herbs and Spices

Name \_\_\_\_\_

Name of Herb	Draw the shape of the fresh leaf	Rub the fresh leaf slightly – describe the smell	Sample a small portion of the fresh leaf – describe the taste	Describe the colour of the dried leaves	Rub a bit of the dried leaves – how does the smell compare to fresh

Name of spice	Draw a picture of the whole spice.	Seed, Root or Bark?	Describe the colour of the ground spice	Describe the smell of the ground spice

### Conclusions:

1. What has stronger flavour, fresh or dried herbs?
2. If you were going for colour, for example using herbs as a garnish, what would you use, fresh or dried?
3. What is the difference between spices and herbs?
4. What is the advantage of using fresh herbs?

### Did you know?

It is estimated that the value of fresh herbs grown in BC is valued in excess of \$1 million.

## Teaching Activity 3 – Herb Taste Test

### Objective:

- Students will be able to discriminate between different herbs
- Students will be able to describe and analysis the different tastes of the herbs

### Materials:

- 1.5 l plain yogurt
- 6 different herbs [use the five from Activity 2 (parsley, basil, oregano, mint, thyme) and one “surprise”] – if fresh 30 ml chopped of each, if dried 5 ml of each vegetables for dipping in herb dressing [celery and/or carrot sticks]
- Copies of Handout #2 – What is the Mystery Herb?

### Advanced Preparation:

- Make 6 yogurt dips by combining 250 ml of yogurt and each of the herb. [If made in advance the flavours have a better chance to permeate.]

### Procedure:

- Distribute carrots and celery stalks and have students wash and make celery and carrot sticks. They will need 6 of each per person.
- Set out the 6 dips in different parts of the room, label each A,B,C, etc. Have students take their celery and carrot sticks to each station. Direct them to sample each dip twice, once with a carrot stick and once with a celery stick and write down on their handout what herb they think it is. [Note: also remind students of food safety practices, e.g., no double dipping] OR Divide each of the dips into small portions to be distributed to each of groups of students.
- After all the groups have had the chance to taste and analyze each herb, come together as a class and discuss the results. Reveal what the herbs were in each dip. Have students record on their handout.
- Discuss the questions on the handout.
- Discuss why it is important in food preparation for cooks/chefs to know the flavour of the various herbs.

### Extensions for lesson:

- Make herbed vinegars. Put 125 ml of slightly crushed fresh leaves of the herb you choose (or 15 ml if the herb is dried) into a jar with 500 ml (2 cups) of white, cider, or wine vinegar. Let it stand for about 4 days; then strain the liquid, discarding the herbs, and bring the vinegar to a boil. Remove the vinegar from heat and pour it into hot, sterilized jars. Cap them tightly and store in a cool, dark shelf or cupboard.

Handout #2 – What is the Mystery Herb?

Name \_\_\_\_\_

- A My guess \_\_\_\_\_ What it really was \_\_\_\_\_
- B My guess \_\_\_\_\_ What it really was \_\_\_\_\_
- C My guess \_\_\_\_\_ What it really was \_\_\_\_\_
- D My guess \_\_\_\_\_ What it really was \_\_\_\_\_
- E My guess \_\_\_\_\_ What it really was \_\_\_\_\_
- F My guess \_\_\_\_\_ What it really was \_\_\_\_\_

What herbs have you tasted before? \_\_\_\_\_

\_\_\_\_\_

What herbs would you like to use as flavourings? \_\_\_\_\_

\_\_\_\_\_

Which herbs are grown in BC? \_\_\_\_\_

\_\_\_\_\_

Why is it useful to know the flavour of herbs? \_\_\_\_\_

\_\_\_\_\_

Herbs are often used in combination. What 2 herbs do you think would make a good combination? \_\_\_\_\_

\_\_\_\_\_

## Teaching Activity 4 – Comparing Dried Herbs and Fresh Herbs in Cooking

### Objective:

- The student will analyze the difference between dried and fresh herbs
- The student will evaluate the pros and cons when using either dried and fresh herbs
- The student will demonstrate the use of both fresh and dried herbs in cooking by preparing a tomato sauce and pasta

### Materials:

- fresh herbs – basil, parsley, oregano
- dried herbs – basil, parsley, oregano
- ingredients for a simple tomato sauce for demonstration and tasting
- ingredients for a simple tomato sauce and pasta for a lab
- handout #3 – Tomato Sauce and Pasta Recipe

### Procedure:

- Teacher demonstration of Tomato Sauce and Pasta Recipe. For the demonstration double the recipe for tomato sauce and then distribute it into 6 small saucepans before the herbs are added. Then the following herbs are placed into each of the 6 saucepans:
  - 15 ml chopped fresh basil
  - 5 ml dried basil
  - 15 ml chopped fresh oregano
  - 5 ml dried oregano
  - 15 ml fresh or five ml dried parsley
  - basil, oregano & parsley (2 ml each if dried OR 5 ml each if chopped fresh)
- Have the students sample each of the sauces and decide what herbs they have when they do the lab the next day.

### Teacher References

- pasta information [http://www.canadianliving.com/food/cooking\\_school/all\\_about\\_pasta.php](http://www.canadianliving.com/food/cooking_school/all_about_pasta.php)

### Extensions for lesson:

- Serve the pasta with French or Italian bread and herbed butter. To make herbed butter simply combine butter or margarine with the herbs and beat together with the butter until smooth. Use approximately 5 ml of dried herbs per 30 ml butter.

## Handout #3 – Tomato Sauce and Pasta Recipe

Name \_\_\_\_\_

### Ingredients:

- 15 olive oil
- 30 ml chopped onion
- 1 garlic clove, minced
- 300 ml tomatoes (either fresh or canned\*) chopped
- 15 ml tablespoon tomato puree (or tomato paste? Sauce?)
- salt and pepper to taste
- \_\_\_\_\_ (put in the herbs you want and the amounts)
- 125 – 250 ml of pasta†

\* if canned include the juice. Diced canned tomatoes easier to work with than whole.

† almost any pasta will do. Penne or macaroni are suitable for most sauces. Fusilli, rotini, or rigatone are good with chunky sauces that will nestle in the grooves of the pasta

### Directions

1. Cook the pasta. Fill a large pot three quarters full of water and bring to a boil (add in 5 ml of salt and 5 ml of oil). Once the water comes to a boil add in the pasta and cook it for the length of time outlined on the package. Drain in a colander.
2. In a large skillet over medium heat, cook onion and garlic in olive oil until translucent.
3. Stir in tomatoes; cook until juice begins to thicken.
4. Stir in tomato paste, herbs and salt and pepper.
5. Reduce heat and simmer 15 minutes more, until rich and thick.
6. Toss with cooked pasta and serve immediately.

### Summary

1. Which herbs did you choose? Why? \_\_\_\_\_  
\_\_\_\_\_
2. Make a T chart on the back of this sheet and outline the pros and cons of fresh herbs. Do the same for dried herbs.

## Teaching Activity 5 – Analyzing the Different Marketing Forms of Herbs

### Objective:

- The student will analyze the different forms of marketing herbs
- The student will be able to discriminate between the different ways that herbs are used and sold
- The student will be about to compare and evaluate the pros and cons of the different form of marketed herbs

### Materials:

- As many different market forms of herbs as you can obtain. Retain packaging. Note the prices. Examples: fresh bunches; fresh prepackaged herbs; fresh- living potted plants; dried bought in bulk; dried bought in small containers; paste in a tube. [Note: if possible use examples of just one herb, e.g., basil.]
- Handout #4 – Consumer Comparison of Market Forms of Herbs

### Procedure:

1. Display the samples of the different market forms of herbs. If you are able to obtain the prices, make a price sign to go with each of the herb forms.
2. Have students analyze the different forms of herbs and fill out Handout #4 - Consumer Comparison of Market Forms of Herbs
3. Hold a class discussion comparing the products and reviewing the summary questions.

Handout #4 – Consumer Comparison of Market Forms of Herbs

Name \_\_\_\_\_

Name and Description of Herb Product	Cost & Amount of Herb Obtained	Where From?	Ingredients?	How to store?	Suggested Uses

Summary:

1. Which herb product traveled the fewest "food miles"? \_\_\_\_\_

What would be the advantages of choosing this product? \_\_\_\_\_

\_\_\_\_\_

2. Which herb product was the most expensive? \_\_\_\_\_

What might account for this? \_\_\_\_\_

\_\_\_\_\_

3. Which herb product will keep the longest? \_\_\_\_\_

\_\_\_\_\_

Which one the shortest? \_\_\_\_\_

\_\_\_\_\_

Which herb products have added ingredients? \_\_\_\_\_

\_\_\_\_\_

What might be the purpose of these ingredients? \_\_\_\_\_

\_\_\_\_\_

## Teaching Activity 6 – Research Project on Herbs Grown in BC

### Objective:

- The students will research a particular herb determining the origin, where it is grown, how it is used and other interesting information
- The students will select a recipe that uses the herb they have researched

### Materials:

- book a computer lab with internet access and/or and the library for researching herbs

### Procedure:

- The students will research and either write a 2-3 page research report about a herb OR create a poster to display their research.
- The class can create the criteria for the report together. Examples of criteria that might be included in the report is: the origins of the herb, typical uses for the herb, how to grow and care for the herb, where the herb is grown in BC, what the herb is used for, other information about the herbs that is important or unique, a picture of the herb, clarity of the final product, presentation (neatness, organization, etc.)
- Here is a partial list of Herbs Grown in BC

Angelica	Anise Hyssop	Arnica
Basil	Borage	Burdock
Calendula (Pot Marigold)	Catnip	Chamomile
Chervil	Chives	Coriander
Comfrey	Dill	Echinacea
Fennel	Ginkgo	Goldenseal
Hawthorn	Lavender	Lemon Balm
Lemon Grass	Mint	Nettle
Parsley	Oregano	Rosemary
Sage	Savory	Sorrel
Spearmint	Stevia	Thyme
Valerian	Yarrow	

### Teacher References

- <http://www.bcherbgrowers.com/herbs/index.php/listings?page=3&catid=1>
- <http://www.agf.gov.bc.ca/aboutind/products/plant/herbs.htm>

### Extensions for lesson:

- Include finding a recipe as part of the research project and then have students prepare the recipe in a sampling lab

## Teaching Activity 7 – Who is involved in producing herbs?

### Objective:

- The student will gain an understanding of the types of people and the jobs that are involved in producing herbs
- The students will be able to identify who and where herbs go after the herb farms

### Material:

- computer labs and library for research, costumes for role plays

### Procedure:

- Have students read p. 122/124 Grow BC to learn about growing herbs as an agricultural industry in BC. (available from BC Agriculture in the Classroom Foundation, <http://www.aitc.ca/bc/resources/resource-order-form>)
- Draw students' attention to the section "Who's involved in producing herb?"

Herb growers	Spice millers	Essential oil distillers
Broker/trader	Restaurant owners	Nutraceutical processors
Packers	Store clerks	Flavor brokers
Dehydrators	Processors	Cosmetic companies

- Assign each career opportunity related to herb production, processing and distribution to small groups of students. Their task is to determine what is involved in each career and what they do with the herbs and create either a roleplay or skit that will explain this to the rest of the class. The class will set the criteria of the roleplay together. The roleplay must at least explain how this person or company is involved in herb production. [Note: alternative to a role play – create a poster, a rap song, powerpoint]
- As each presentations is made ask students "In what part of the food system is this person involved?" Use the following flow chart to highlight the different parts of the food system:
- Natural and Human Resources --> (work with) inputs --> (to) produce food --> (which is) transformed --> (for) distribution --> (made) accessible --> consumed (used) -->(leaving) outputs --> (that may become) natural resources (to start the cycle again).
- When all the presentations have been made, debrief with the following questions. What is the order of herb production? When producing herbs, what job comes first? Which one next? What are the jobs and people involved in herb production before they gets to a restaurant or store? What are the jobs and people involved in making essential oil? What are the jobs and people involved in creating nutraceutical products?

## Teacher References

- Profile of Essential Oil Industry in Canada
- <http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1174592767604&lang=e>
- A nutraceutical is any substance that is a food or a part of a food and provides medical or health benefits, including the prevention and treatment of disease. This includes herbal medicines and remedies that are frequently sold in liquid extracts, capsules, tablets or teas.
- Herbal cosmetics include soaps, creams, shampoos, deodorants, lip balms, etc.

## Extensions for lesson:

- Bring in a guest speaker from your community involved with herbs, e.g., a herb grower, a chef who has a herb garden, someone who makes soaps from natural ingredients.
- Have students make some herbal “value added” products, e.g., potpourri, bath bombs, bath salts
- <http://www.teachsoap.com/bombs.html>
- Video on youtube : <http://www.youtube.com/watch?v=AOY7QFOVv6A>

## Teaching Activity 8 – Drying and storing herbs

[**Note:** This activity is designed to use the herbs that students have grown from Activity 1. If they don't have fresh herbs from their window or school gardens then other possibilities are to use herbs picked on a field trip to a herb farm or purchased at a farmers' market or obtained from a local gardener who has a surplus.]

**Objective:** the students will dry and store herbs properly

### Materials:

- Fresh herbs
- Paper towels
- String or elastic bands
- Scissors
- Brown paper lunch bags
- Small glass jars or ziplock plastic bags

### Procedure:

1. Demonstrate how to prepare herbs for drying.
  - Cut healthy branches from herb plants.
  - Remove any dry or diseased leaves
  - Shake gently to remove insects.
  - Bundle 4 - 6 branches together and tie as a bunch using string or a rubber band.
  - Punch or cut several holes in a paper bag. Label the bag with the name of the herb you are drying.
  - Place the herb bundle upside down into the bag.
  - Gather the ends of the bag around the bundle and tie closed.
  - Hang the bag upside down in a warm, airy room.
  - Check in about two weeks to see how things are progressing. Keep checking weekly until your herbs are dry and ready to store.
2. Have students prepare their herbs for drying.
3. When herbs are dry demonstrate how to prepare dried herbs for storing.
  - Remove the leaves from the stems and branches. Discard the stems and branches.
  - Discard any dried leaves that show the slightest sign of mold.
  - Place in containers. Label with name of herb and date. If the leaves are stored whole and crushed just before use they retain more flavour.
  - Store in a cool, dry place away from sunlight.
  - Dried herbs are best used within a year.
  - Use about 5 ml crumbled dried leaves in place of a tablespoon 15 ml of fresh.
4. Have students package their dried herbs and prepare for storage.

## Teaching Activity 9 – Cooking with Herbs

### Objective:

- The student will understand the use of herbs in cooking
- The student will gain a sense of accomplishment by using a herb they grew themselves
- The student will select certain herbs for certain needs and taste in a recipe of their choice

### Materials:

- herbs they have grown,
- ingredients for the recipes chosen
- required cooking equipment

### Procedure:

- demonstrate either or both of the recipes included (Focaccia Bread, Herbed Biscuits) and then have a lab
- have students prepare the recipe they selected from their Herb Research Report
- have student select and prepare a recipe that contains herbs available from their herb gardens.

### Teacher Reference

- Video on storing and cooking fresh herbs:
- <http://allrecipes.com/HowTo/Cooking-with-Fresh-Herbs-Video/Detail.aspx>

### Extensions for lesson:

- Have students keep a “herb record” of all the recipes they make during the course that include herbs.

## Handout # 5 – Focaccia Bread Recipe

Name \_\_\_\_\_

### Dough:

- 250 ml all-purpose flour
- 60 ml whole wheat flour
- 7 ml quick-rising yeast
- 5 ml dried herbs (choose from the herbs dried in class or use dried rosemary)
- 2 ml salt
- 250 ml hot water (between 50° - 55°C)
- 15 ml olive oil
- 2 ml sugar

### Topping:

- 2 ml olive oil
- 5 ml dried herbs (use a combination of herbs dried in class or 5 ml Italian seasoning)
- 1 ml coarse salt
- ½ ml pepper

1. Preheat the oven to 400°F.
2. In a large bowl, combine flours, yeast, herbs, salt. Combine water, oil and sugar and pour over flour mixture (do this quickly so the water does not cool). Mix with a wooden spoon until the mixture begins to come together and forms a ball.
3. Turn the dough onto a lightly floured surface and knead for 8 to 10 minutes until smooth and elastic. Sprinkle lightly with flour if dough is sticky.
4. Place in a greased bowl and let rest in a warm place (ideally this should be an hour but in class this can be 10 minutes).
5. Grease a baking sheet and place dough on the baking sheet and pat and stretch into a circle 2-3 cm thick. Poke with fingers to create little indentations in the top.
6. For the topping, brush oil over the dough then sprinkle with herbs and salt and pepper.
7. If there is time, let rise for up to 30 minutes. If not bake for 15 – 20 minutes.
8. Remove from pan and cool on a wire rack.

## Handout # 6 – Herbed Drop Biscuits Recipe

Name \_\_\_\_\_

[This recipe uses vegetable oil instead of solid shortening thus avoiding saturated and trans fats.]

125 ml whole wheat flour  
125 ml all purpose flour  
7 ml baking powder  
2 ml garlic salt  
15 ml finely chopped fresh parsley or chives  
5 ml dried herbs (e.g., use one of, or a combination of. basil, oregano, sage, rosemary, thyme)  
40 ml vegetable oil  
100 ml milk

1. Pre heat the oven to 400°F.
2. Combine dry ingredients and herbs in a mixing bowl.
3. Combine vegetable oil and milk. Pour over the top of the dry ingredients and stir with a fork until the mixture leaves the sides of the bowl.
4. Drop the biscuit dough by spoonfuls onto an ungreased baking sheet. Make sure they are all about the same size.
5. Bake 12 to 15 minutes. Remove from oven and cool on a wire rack.

## Teaching Activity 10 – Field Trip To An Herb Farm In The Local Area

### Objective:

- The student will identify which herbs are grown at some of their local farms
- They will gain awareness of local produced of herbs and value added products in their area

### Procedure:

[**Note:** Because every farm is going to be different, appropriate activities will vary. Be sure to follow the field trip procedures of your school, e.g., permission forms, ensuring adequate supervision, making arrangements for transportation, etc.]

1. Choose an herb farm to visit in your local area. Contact the farm. See the BC Herb Growers directory at: [www.bcherbgrowers.com/membersdir/index.php?page=2&t=1](http://www.bcherbgrowers.com/membersdir/index.php?page=2&t=1)  
There is also a list of farms who are willing to host field trips on the BC Agriculture in the Classroom website: [http://www.aitc.ca/bc/bcs\\_agriculture/farm\\_tours](http://www.aitc.ca/bc/bcs_agriculture/farm_tours)
2. Discuss with the farmer what activities would be appropriate. Have students brainstorm possible activities. Examples of possible activities:
  - Draw a map of the farm.
  - Interview the farmer and farm workers.
  - As a class come up with a set of interview questions.
  - Engage in some of the farm activities, e.g., picking herbs
  - Have students name draw pictures of the shape of each herb grown on the farm.
  - Design a scavenger hunt of things to find on the farm
  - If herbs are processed on the farm have them create a flow chart of the process.
  - Describe any “value added” products made on the farm and how they are made.

### Teacher Reference

- Tips for Tours is a comprehensive guide for farm tours available from BC Agriculture in the Classroom Website: <http://www.aitc.ca/bc/resources/resource-order-form>
- See best practices for Field Days at:
- <http://www.extension.umn.edu/distribution/naturalresources/DD8208.html>

### Extensions for lesson:

- If a field trip is not possible consider a “virtual field” trip. Many herb farms have websites that could be used for this purpose.

