



# HARVEST LESSONS

THIS MONTH'S THEME:

## HERBS

*Lesson Plan*



HARVEST LESSONS ARE A FUN WAY FOR K-4 CLASSROOMS TO EXPLORE, TASTE AND LEARN ABOUT EATING MORE FRUITS AND VEGETABLES EVERY DAY.

## ACTIVITY SUMMARY

ACTIVITY	GRADE LEVEL	CURRICULUM CONNECTION	TIME
#1: Intro to Herbs	all	<b>Science:</b> geography <b>Literacy:</b> speaking, listening	10 min.
#2: Observe & Draw Herbs	all	<b>Health:</b> nutrition <b>Science:</b> classification <b>Math:</b> measurement	15 min.
#3: Discuss Local History of Herbs	all	<b>Science:</b> geography <b>Literacy:</b> listening comprehension	10 min.
#4: Taste Test: Herbal Tea	all	<b>Science:</b> nutrition <b>Math:</b> measurement, graphing/tallying responses	20 min.
#5: Handmade Tea Bags & Tags	all	<b>Science:</b> nutrition	15 min.
#6: Taste Test: Basil Pesto	all	<b>Math:</b> measurement, graphing/tallying responses	20 min.
#7: Herb Walk	all	<b>Science:</b> structure of organisms	30 min.
#8: Field Guide	3-4	<b>Science:</b> comparison, structure of organisms	15 min.
#9: Herb Garden	3-4	<b>Writing:</b> explanatory texts <b>Math:</b> measurement, graphing/tallying responses	20 min.
#10: Herb Planting	3-4	<b>Science:</b> life cycles	15 min.



## INTRODUCTION

ALL GRADES

**Focus on the following questions:**

**GRADES K–2:** What are herbs? How do we use them? How are herbs good for our bodies? How do they taste? Who can name an herb?

**GRADES 3–4:** What is the history of herbs and what part of the world do they come from? What herbs grow in our gardens and woods?

## ACTIVITY #1 (10 MINUTES)

ALL GRADES

### INTRO TO HERBS

**WHAT IS AN HERB?** An herb is defined as a nonwoody, seedbearing plant, or part of a plant that is used for food, medicine or flavoring. When we use a plant for its flavors, we call it a “culinary herb” and when we use it for its healing qualities, we call it a “medicinal herb” but there is a lot of overlap, and our favorite herbs for flavor may also help our bodies in different ways.

**WHAT PART OF THE PLANT DO WE USE?** Often we use the leaves of herbs, but seeds, and roots often have culinary and medicinal uses too.

## ACTIVITY #2 (15 MINUTES)

ALL GRADES

### OBSERVE & DRAW HERBS

Pass around examples of dried and fresh herbs if available. What are the differences between the two? What do you notice about the plant? What shape are the leaves? What shape is the stem? What foods does each herb smell like?

Rub the leaves and then smell your fingers. Cater the discussion to age levels and appropriateness/knowledge. Have students draw and make observations in journals.

**GRADES K–2:** What color is this? How is it good for you? (Put food on the body). What part of this plant are we eating? Review that plant part's job. Where does the plant grow? (in the garden or in the wild).

**GRADES 3–4:** Origins: Where does this food come from? Where did it originate, and where does it grow? Put the food on the map. Find the countries associated with the origin of each herb, on a map.



*(activity #2, continued)*

## BASIL

**Family:** mint

**Overview:** Originally native to India and other tropical regions of Asia. A common culinary herb, basil is often used in Italian, and Asian cuisine. Common examples include: pesto (meaning “pounded or crushed”) and basil-chicken stir fry.

**Medicinal Uses:** fresh basil has antibacterial, and anti-inflammatory qualities. It can be used to treat upset stomach, cough, and sore throat.

## OREGANO

**Family:** mint

**Overview:** A common culinary herb, this plant is native to many countries in Europe and Asia including Italy, Greece, and Turkey. It is found in cuisines all over the world, but especially around its native grounds. The name comes from the Greek meaning “mountain joy.” This is the herb that makes pizza sauce taste so great!

**Medicinal Uses:** In Ancient Greece, Hippocrates used oregano for treatment of stomach and respiratory ailments, and still today it is used there to relieve sore throats. In Austrian herbal medicine, it is used as a tea or ointment to relieve respiratory and gastrointestinal problems.

## MINT

**Family:** mint

**Overview:** A favorite herb for its fresh flavor, the most popular varieties, peppermint, and spearmint are used as culinary herbs in sweet and savory dishes, and as tea.

**Medicinal Uses:** Mint contains the organic compound menthol, which is used in aiding digestion, relieving muscle pain, and headache. It is also used as an anti-itch agent to aid in the relief of bug bites.

**Pleasing Smell:** Mint is commonly used in aromatherapy (the use of plants and their extract for the calming benefits of their smells.) In Ancient Greece it was used as a room deodorizer, and in Ancient Rome the philosopher Pliny recommended that students use it in a wreath around their neck to “awaken the mind.”

## *Fun Facts About Plant Families*

Many herbs we use are in the mint family, or Lamiaceae. Plants in this family have flowers with fused petals like lips and opposite alternating leaves, meaning they come out of the stem on opposite sides, and in alternate directions.

A fun way to tell if a plant is in the mint family is by touching its stem. All plants in this family have square stems!



## ACTIVITY #3 (10 MINUTES)

ALL GRADES

### DISCUSS LOCAL HISTORY OF HERBS

In the past, Native Americans relied on plants for healing properties. They had a broad understanding of the human body. Herbal healers were specialists in the village, but most families gathered herbs for their own regular use, being careful to take only what they needed.

Today, many communities still feel a strong spiritual connection between herbs and good health. Remedy blends were complex and recipes passed down through generations. Common Native American remedies used herbs that can still be easily found: skunk cabbage, horsemint, thistle, catnip, dandelion.

There was very little disease in Native American communities, and most of the herbs they used were to treat common ailments, injuries, and childbirth. When European settlers arrived they brought with them diseases such as smallpox that Natives were not immune to, and which killed as many as 25 to 50% of tribal populations.

[www.everygreenherb.com/nativeAmericans.html](http://www.everygreenherb.com/nativeAmericans.html)

When European settlers arrived, they brought herb seeds from their home countries and their own knowledge of healing herbs. Native knowledge has contributed much to modern medicine. Today, herbalists use the knowledge passed down from our ancestors to treat sickness.





## ACTIVITY #4 (20 MINUTES)

ALL GRADES

### TASTE TEST: HERBAL TEA

#### PREPARATION

At home, prepare a variety of teas, and bring in small cups for each student. Suggested herbal teas include: mint, chamomile, lemon balm, lavender, and tulsi.

Bring paper for labels, ziplock bags, and loose leaves of the teas for children to make their own tea blends, (see instructions for making your own cloth tea bags)

#### DISCUSSION

Are all herbs the same? Each herb has different properties that help us in different ways. Are all herbs safe to eat? Some herbs, like the ones we are going to try today, are safe, and good for kids. Many herbs are used for medicine, but we do NOT eat them all. Some herbs are used on our skin, rather than eating.

Some herbs are really strong medicine, and we only need to take a small dose and no more. You can learn to be an herbalist, with more experience, and learn to harvest plants in the wild, but you must do it with an adult and be sure to do it safely.

#### ACTIVITY

Before sampling each tea individually discuss the part of the plant we use and what each plant does for us. Show a fresh example if possible, or picture or diagram if you are doing this activity during the winter and don't have access to fresh herbs. Following the taste test, get students' reaction to the taste and chart responses (liked it, loved it, no thank you).

### *Common Tea Herbs*

#### MINT

**Family:** Lamiaceae (mint family)

**Part of the Plant:** leaves

**Uses:** As a medicinal herb that calms our stomach, helps us sleep, aids headache, and mild fever. Mint is also commonly used as a culinary herb.

#### CHAMOMILE

**Family:** Compositae (daisy family)

**Part of the Plant:** flower

**Uses:** Chamomile is great to relax a stomach-ache, lowering fever, and is a calming tea that is great before bedtime. It can be used topically to wash sores and minor wounds.



*(activity #4, continued)*

## LEMON BALM

**Family:** Lamiaceae (mint family)

**Part of the Plant:** leaves

**Uses:** As a medicinal herb lemon balm helps headache, fever, toothache, cough, upset stomach and cramps. Is also commonly used in the kitchen as a culinary herb.

### ACTIVITY

After students have tried all the teas, share a blend of the teas, with a little honey or maple syrup. Usually we don't drink single herbs, but mix different herbs together. Explain that students are going to make their own tea blends, and package to take home to their families.

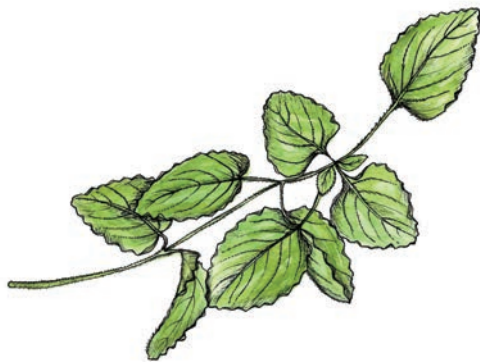
They may design a label and name for their unique tea blend. Send them home with three empty tea bags and instructions for their parents on ironing them shut, or use a reusable cloth tea bag.

### DISCUSSION ADD-ON

You can add discussion of marketing techniques and ingredient lists. Companies will often use techniques to sell us things that aren't good for us. Have students read the ingredient list on cans and bottles of iced tea. Ingredients are listed in the order of most to least.

What is the first ingredient? Are there any herbs listed? Can we make a campaign and labeling to sell healthy teas? Here is a "rethink your drink" short video to show: <http://youtu.be/iP-haqmmXyY>.

Making your own tea and adding honey or maple syrup to sweeten is much healthier than buying prepared iced teas that are loaded with sugar.





## ACTIVITY #5 (15 MINUTES)

ALL GRADES

### HANDMADE TEA BAGS & PERSONALIZED TAGS

#### MATERIALS

##### You will need:

- 1 pair sharp scissors
- 1/2 yard cheesecloth or muslin fabric (found at most hobby/craft/fabric stores)
- variety of loose tea (I chose 6-7 different teas)
- kitchen twine or embroidery thread, various colors
- cardstock, various colors
- 1 clear-drying glue stick
- fine-point Sharpie or black pen
- ruler or measuring tape

#### DIRECTIONS

##### To make tea bags:

1. With sharp scissors, cut fabric into a square about 6 x 6 inches.
2. Cut a piece of thread or twine about 17 inches long.
3. Place 1 teaspoon of loose tea in the center of each piece of fabric.
4. Gather up fabric around tea and twist.
5. Tie with kitchen twine or embroidery thread, securing with 1-2 knots.
6. Cut off the excess top fabric. Repeat as needed.

##### To make personalized tags:

1. Have assembled tea bags nearby. If threads are very long, trim slightly.
2. Fold various colors of cardstock in half.
3. With the cardstock still folded in half, cut out two identical shapes with scissors.
4. Rub glue stick on one of the two identical shapes.
5. Place one end of the kitchen twine (attached to the tea bag) on the glued shape. Place the other shape on top.
7. Sandwich together and press for a few seconds.
8. Cut string of other end of twine, not attached to tag. Set aside and repeat.
9. With a fine-point Sharpie or pen, write the title of each tea on the tag.
10. Twist the twine around the top of each tea bag (where you knotted it) to keep from tangling.
11. You're done!

#### TIPS

One teaspoon loose tea is enough for one standard 6 oz. cup of tea.

Colored kitchen twine and embroidery thread will not bleed into the hot tea.

[www.thecomfortofcooking.com/2013/05/homemade-tea-bags-personalized-tags](http://www.thecomfortofcooking.com/2013/05/homemade-tea-bags-personalized-tags)



## ACTIVITY #6 (20 MINUTES)

ALL GRADES

### TASTE TEST: CULINARY HERBS

#### BASIL PESTO

##### INGREDIENTS

2 cups packed fresh basil leaves

2 cloves garlic

1/4 cup pine nuts (common allergen, can be replaced with sunflower seeds for a nut-free and less expensive ingredient; other nuts also work well, such as walnuts)

2/3 cup extra-virgin olive oil, divided

Kosher salt and freshly ground black pepper, to taste

1/2 cup freshly grated Pecorino or parmesan cheese

##### DIRECTIONS

Combine the basil, garlic, and pine nuts in a food processor and pulse until coarsely chopped. Add 1/2 cup of the oil and process until fully incorporated and smooth. Season with salt and pepper.

If using immediately, add all the remaining oil and pulse until smooth. Transfer the pesto to a large serving bowl and mix in the cheese. If freezing, transfer to an air-tight container and drizzle remaining oil over the top. Freeze for up to 3 months. Thaw and stir in cheese.

Try on crackers, cucumbers, or bread and be sure to graph results.

*Copyright 2003 Television Food Network, G.P. All rights reserved*

## ACTIVITY #7 (30 MINUTES)

ALL GRADES

#### HERB WALK

Take an herb walk! In the spring or summer, take a walk outside the classroom to identify some wild herbs that grow outside. Invite a local herbalist to come share their knowledge if you are not comfortable with the information.

Walking the World in Wonder: A Children's Herbal, is a great kid (and adult) friendly herb resource book with photos, descriptions of uses, and recipes. You could bring this along on a walk, or bring your favorite field guide.





## ACTIVITY #8 (15 MINUTES)

GRADES 3-4

### FIELD GUIDE

Make a field guide. Assign each student a research project on a specific plant. Have them create a page to your classroom's field guide. Photocopies from *Walking the World In Wonder* can be used for their resources, and this project could involve computer research.

## ACTIVITY #9 (20 MINUTES)

GRADES 3-4

### HERB GARDEN

Plan your herb garden. What culinary and medicinal herbs will you plant in your herb garden? Map out your herb garden on graph paper, making it 24 square feet, and write a paragraph description of your garden. Did you put culinary herbs and medicinal tea herbs? How do you plan to use the plants? What parts of the plants will you be using?

## ACTIVITY #10 (15 MINUTES)

GRADES 3-4

### HERB PLANTING

Start herb seeds in the classroom. Is there access to a sunny window, or grow lights in the classroom? Start seeds with students for the school garden, or for students to take home, and discuss care for the seeds and mature plants. For a fun movement activity with younger kids, act out the life of a seed. Have students write labels.

## CLOSINGS

### REFERENCES

[Walking in the Woods With Wonder: A Child's Herbal](#) by Ellen Evert Hopman

### ACKNOWLEDGEMENTS

[Vermont Harvest of the Month](#)