

### Maple Sugaring

RESOURCE PACKET FOR PRESCHOOL THROUGH SECOND GRADE





# Thank you for choosing the Kensington Farm Center for your class field trip!

We strive to provide an experience for your students that is enjoyable and educational. To further that experience, we have prepared this post-trip packet for you.

Inside you will find materials related to your program topic including:

- activities,
- crafts,
- and coloring pages.

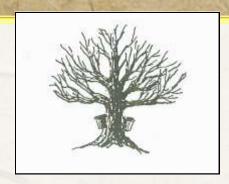
We hope that you find the enclosed materials a beneficial addition to your class. Please feel free to share these materials with any of the other educators whose students attended today's field trip.

If you have any questions or feedback, don't hesitate to contact us at please contact us at (248) 684–8632.

Sincerely,

The Kensington Farm Center Interpretive Staff

P.s.: Don't forget to re-visit us at our blog at metroparks.com. It's full of pictures you and your students will recognize!



## These learning activities are springboards to lively teaching and learning using the theme of Maple for Pre-kindergarten through 2nd grades.

Language Arts, Music, Art

#### Home-grown Maple Songs

Substitute the word "maple" as a key word in familiar songs. For example, "one little, two little, three little maple leaves" or "once a farmer had a tree..." (See our sing-along page for more.)

#### Chilly Maple Leaves

Use lightweight paper, crayons and maple leaves to make leaf rubbings. If your maple unit will take place during the sugaring season when leaves are not available, you might plan ahead by freezing a supply.

#### Maple Story Time

Read fiction and nonfiction materials to children. (Check out our book list on the last page.)

#### A Classroom Maple Tree for All Seasons

Use a real maple tree branch in a bucket of sand or a paper model of a tree to illustrate seasonal changes. Hang paper leaves of the appropriate color, snowflakes, buckets, flowers, birds, etc. from the branches.

#### Spell it with Maple

Include words related to maple in spelling lessons; use maple sentences to present spelling test words.

#### Make a Maple Book

After a visit to a sugarhouse, write stories and illustrate the trip. Have students include these in their own books about maple.

The activities on pages 3-9 are selections from *The Maple Sugaring Story: A Guide for Teaching and Learning about the Maple Industry.* by Betty A. Lockhart Perceptions Publishing. 1990. ISBN 13: 9781880327043

#### Maple Chefs

After preparing a simple recipe that does not require heat, have the children demonstrate how they made the recipe, giving step-by-step instructions- "live" or videotaped, imitating a television cooking show. (*Try our recipe below*)



#### Maple-Cream Cheese Frosting

#### Ingredients:

1/2 c. pure maple syrup 1/2 c. (1 stick) unsalted butter, room temp.

1 c. sifted powdered sugar 4 oz. cream cheese, room temp.

#### Directions:

Cream butter and cream cheese until smooth. Add sugar and maple syrup and mix until smooth. If desired, stir 3/4 cups chopped pecans into frosting. Spread on cupcakes, cookies, etc.

#### Writing Maple Recipes

Have the children write giant recipe cards for the above recipe, or for younger children, the teacher may do this on a chart as a group activity. Include ingredients, method, number of servings and an illustration. When this is done as a group activity on a chart, the chart information may be transferred to a duplicated paper that each child may illustrate. The Recipe Card may be used as a reading activity.

#### Mini Maple Pots

Have students make miniature maple boiling vessels. These may be constructed of clay and/or wood. What would be needed to make a metal boiling pot? If you were a native American, would you be happy to have an iron or copper pot? Why or Why Not?

#### The Sugar-maker's "Sweet": Acting it Out

Using the music of the Nutcracker Suite by Tchaikovsky, have the children dance and pantomime the sugaring season and its jobs.

#### Maple from A to Z

Prepare a maple alphabet using key words from the process. Example: A-Arch, B-Buckets, C-Color etc.

#### How Does the Maple Tree Grow?

Act out the growth of a tree- seedling, sapling, large tree, rainstorms, leaves falling, winter storms, spring thaw, tapping, leaves bursting, summer sun.

#### Maple Fun and Games

Play a game of Maple Leaf Tag. Students have a maple leaf taped to their backs. The "tree "who is "it" tries to collect as many leaves as possible in two minutes. The first one tagged becomes the next It Tree.

#### Setting a Maple Scene

Build a sugarhouse and sugar woods diorama out of a shoebox. Useful materials may be: clay, *polyfill*, popsicle sticks, aluminum foil, wire, pebbles.

#### Design a Maple Placemat

Placemats may be drawn on paper, and then covered with a laminate, or arrangements of maple leaves placed on paper may be sealed with clear "contact" paper.

#### Maple Shapes

Ask children to draw a design for a maple candy mold. Discuss molds and the ways shapes occur. Children might also enjoy experimenting by using various molds such as walnut shells or small containers and clay or play-dough to simulate maple candy.

#### Science and Math

#### A Teacher for All Seasons: The Maple Tree

Write a description or orally tell of the visible seasonal changes in a maple tree. Use magazine pictures to help explain the process. Mount the pictures for students to put in order.

#### Leafit to Maples

Examine the rubbings made in Art Activity Section. Note the details of the shape of the leaf, and the veins. What color is the leaf in each season?

#### Maples from Seed to Stump

Use drawings and pictures to explore the life cycle of a tree from seed to stump. Take a nature walk to a place where trees in different stages of life may be found.

#### Making Maple Syrup, an Orderly Process

Mount pictures showing the various stages of the sugaring process. Have students put the pictures in order.

#### Maple-Flavored Skills

Prepare a food that contains a pure maple product. Reading, counting, measuring and observing are all skills that may be taught and reinforced during this activity. Sharpening the perceptual senses of taste and smell, as well as broadening children's exposure to new tastes are added benefits.

#### Tree Talk

Learn the significant parts of a tree: roots, trunk, crown, leaves. Discuss the terms branches, twigs, bark. Use pictures to teach these terms, then live trees outdoors to reinforce the learning. Have children draw a tree, or cut a picture of a tree from a magazine, and label the parts. The teacher might prepare an audio tape, speaking from the viewpoint of the tree. "I am an old sugar maple tree. I live by the side of a road. My trunk is big now, too big for anyone to put their arms around. But when I was only two years old my trunk was tiny. Point to my trunk."

#### Magnified Maple Leaves

Have the children examine the underside of a maple leaf. What do they see? If possible, arrange for magnifying glasses to be available so that details may be noted. Obtain other leaves. Have the children compare the maple leaf with other leaves. How are the leaves similar or different?

#### Liquid Measuring with Maple

Set up a display of empty maple syrup containers to learn the terminology of liquid measurement. Half-pints, pints, quarts, half gallons, gallons. Milk and other dairy product containers may serve as substitutes. Label the containers prominently and provide tasks for the children such as "Fill the half pint container with water. How many half pints will fill one pint? One quart? Etc.

#### Design a Maple Label

Examine a variety of labels from different kinds of food products. What do the labels tell? Look at the ingredients section of labels. Discuss percentages. Obtain grocery store syrup containers. Ask the students if any of the syrups contain maple. Have the students design their own labels for maple syrup containers, including the weight.

## Tasting Maple

The sense of *taste* has a place in the perceptual development and education of children, along with companion senses of sight, hearing, touching and smelling. A maple learning theme provides an excellent opportunity for strengthening the concept of taste, and helping children to appreciate flavor. In addition, the math which can be learned from measurement, counting, and conversion from English to metric and vice-versa will be reinforced by the cooking experience, and the maple flavor. Doing, tasting and smelling will be added to the usual seeing and hearing processes of learning.

Recipes for traditional waffles or pancakes provide learning and tasting experiences, yet are fairly simple to prepare in a classroom setting if a waffle iron, griddle, or electric fry pan is available. When kitchen access is not possible, other foods may be prepared which do not require heat; or, if a reliable "hot plate" or a portable oven is available (often inexpensive at garage sales and flea markets) other maple recipes may be chosen.

#### MAPLE-ON-A-SPOON

Ingredients and Equipment:

Maple syrup (if possible, more than one grade)

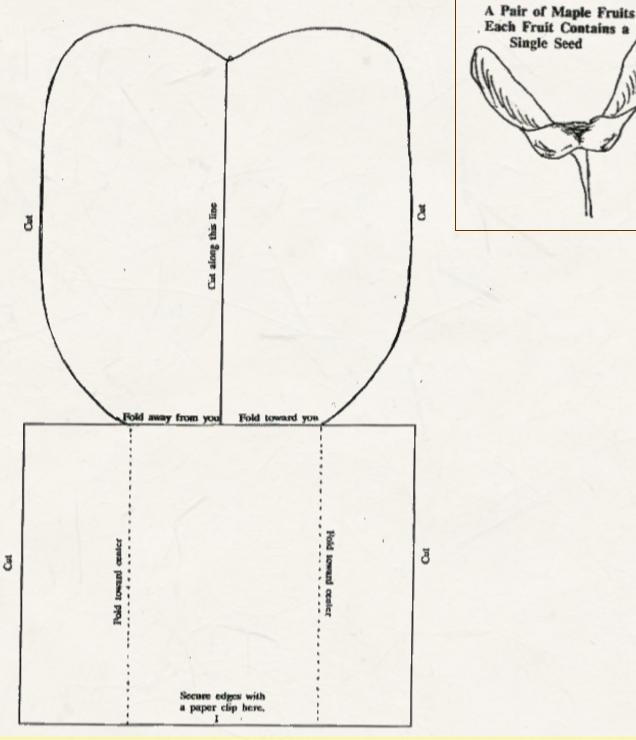
Disposable spoons, or small paper souffle or nut cups (3/4 ounce size)

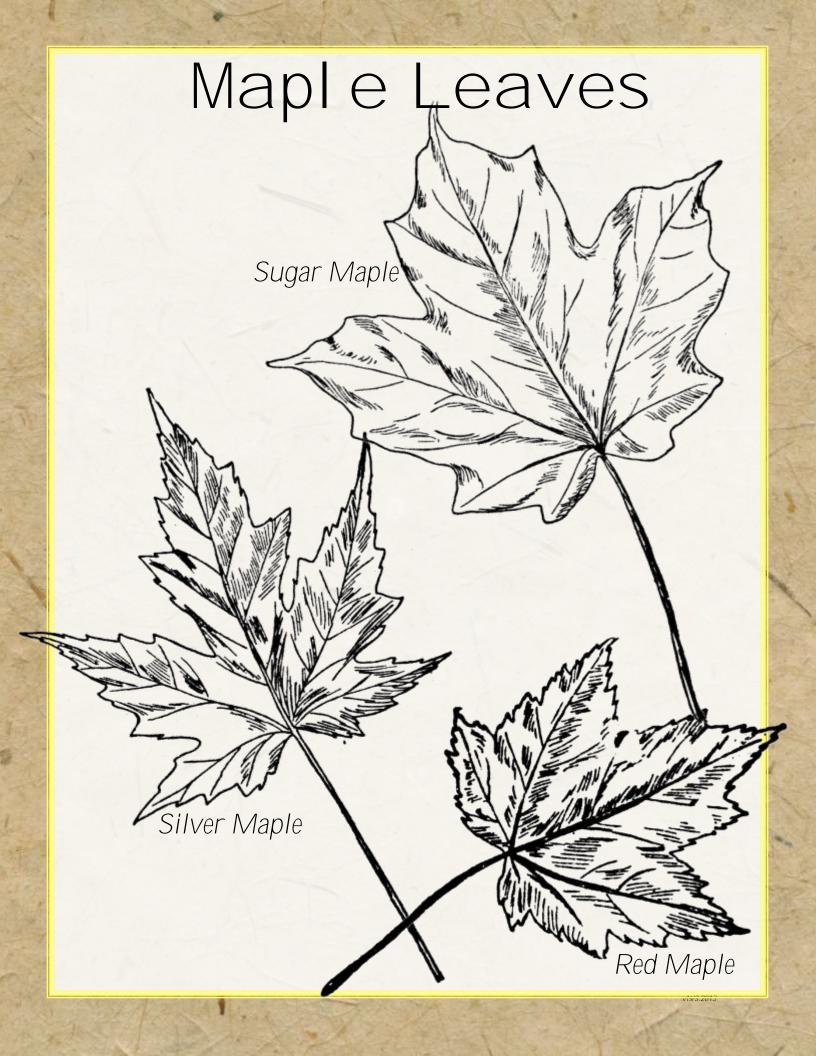
If children have never experienced the flavor of maple, one of the best ways for this to be introduced is pure maple, unadorned, served on a spoon, or in a paper nut or souffle cup. Prior to the tasting, it is important to stress to the children that they are flavor checking, (like the sugarmakers do as they grade syrup) and should take only a small amount at a time, letting it swirl around on their tongues. If a variety of grades of maple syrup are available (from lighter, more delicate to darker and heartier) the tasting experience could be extended to sampling of different grades, and comparing anddescribing the differences. The children also might be reminded that this flavor is essentially the flavor that has been enjoyed by children throughout history, from the time of the early native Northeastern North American Indians, through the years of the settlers, to children of today.

### Maple Helicopters

Have the children trace this template and cut "helicopters" from lightweight construction paper. Fold the two extensions at the base inward along the dotted lines, and secure with a paper clip for weight. Label the helicopters with the children's names and experiment by dropping the helicopters from various heights. The action of the falling helicopter is similar to

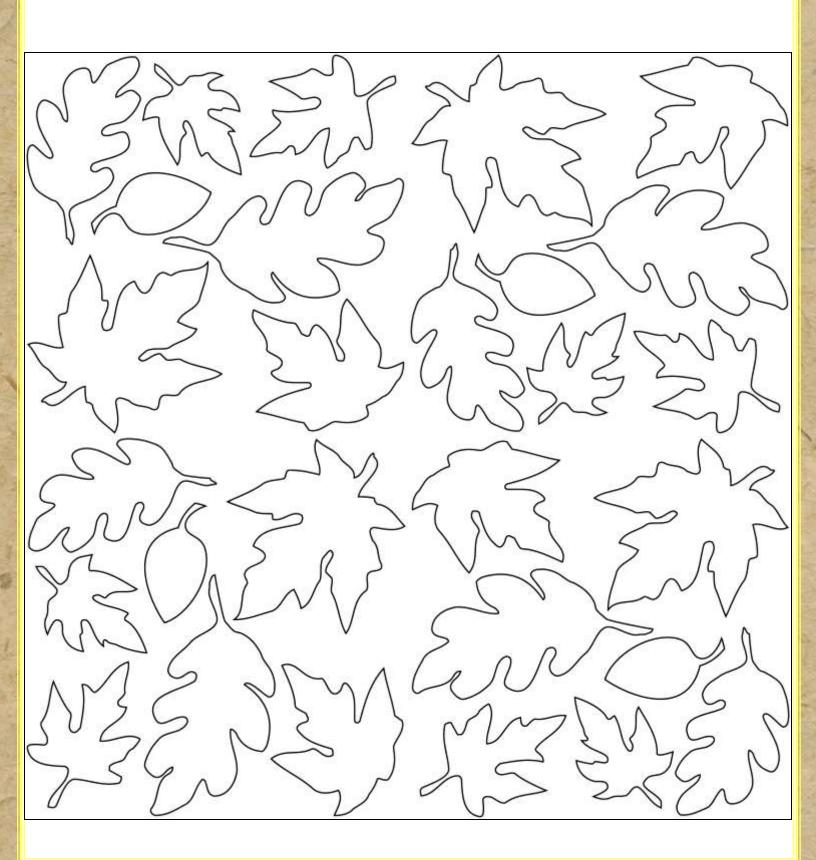
that of the winged maple seeds called "samara".





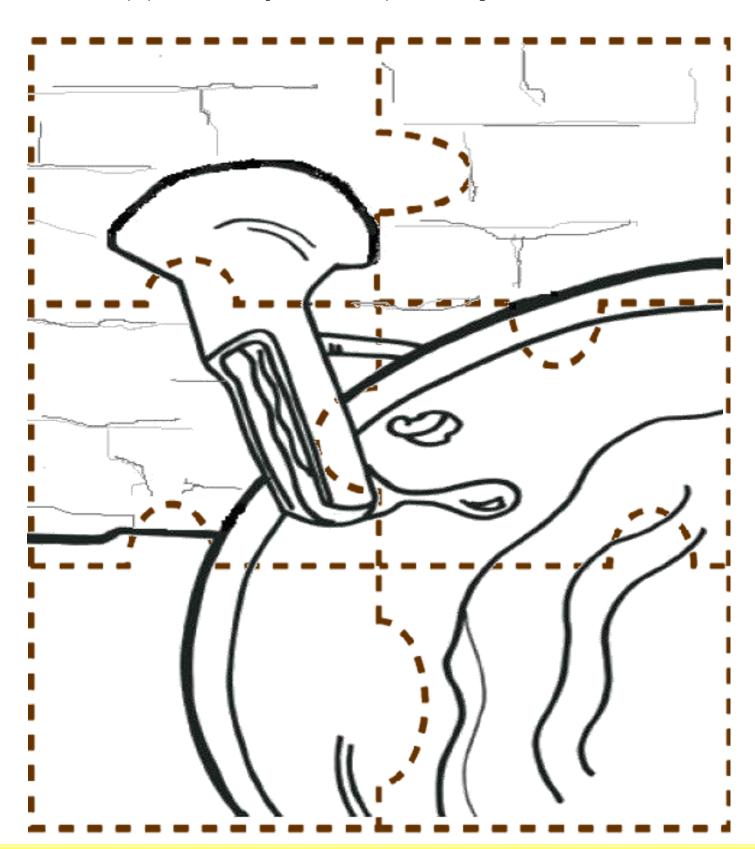
### Find a Match

Find the maple leaves. Try to color the leaves that look alike the same color.



### Make a Puzzl e

Color in the picture on the puzzle. Glue the paper onto cardstock or other heavy paper. When dry, cut out the pieces along the dotted lines.



### Have a Sing-along

The songs students may have learned during the program is printed below. Don't forget to include hand movements!

#### I'M A BIG, OLD MAPLE

(to the tune of I'm a Little Teapot)

I'm a Big, Old Maple, (Point thumbs to chest)

Not a Sprout! (squat low)

There are my branches, (reach high)

But here is my spout. (cup hands by belly button)

When it's sugar season,

Sap comes out! (move hands away from 'spout' like throwing handfuls of water)

Hang the buckets, (hold invisible bucket)

Then pour them out. (pour invisible bucket)

#### TEN LITTLE MAPLE TREES

(THE HAPPY SUGAR-MAKER'S SONG)

(Pointing around at little trees while singing)

I see.... One little, two little, three little maples

Four little, five little, six little maples,

Seven little, eight little, nine little maples,

Ten little maple trees!

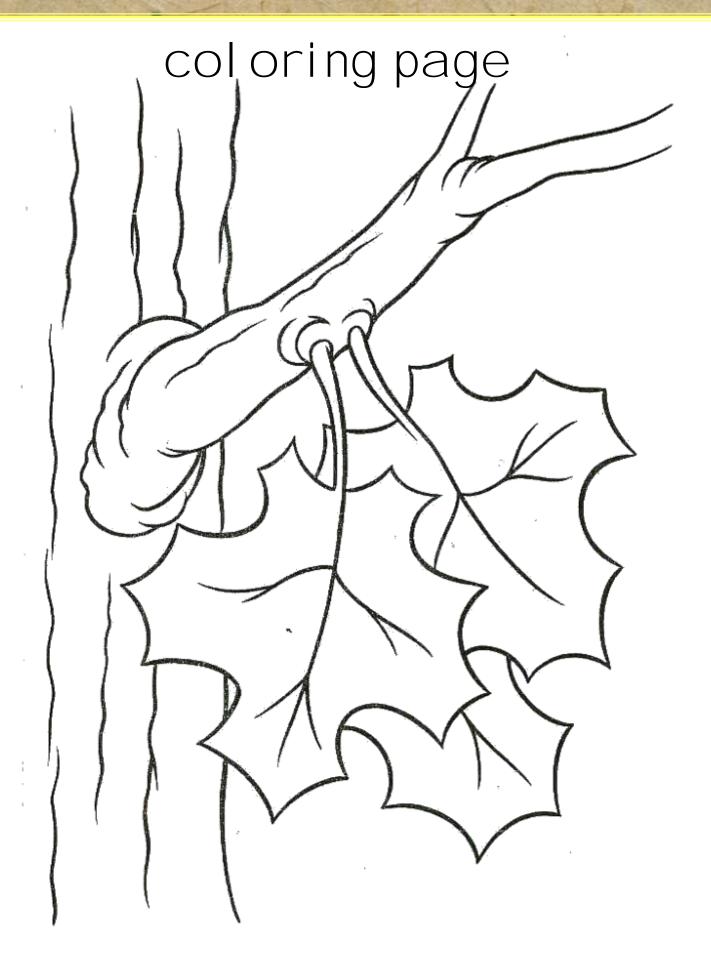
And Backward

I see.... Ten little, nine little, eight little maples,

Seven little, six little, five little maples,

Four little, three little, two little maples,

One little maple tree!

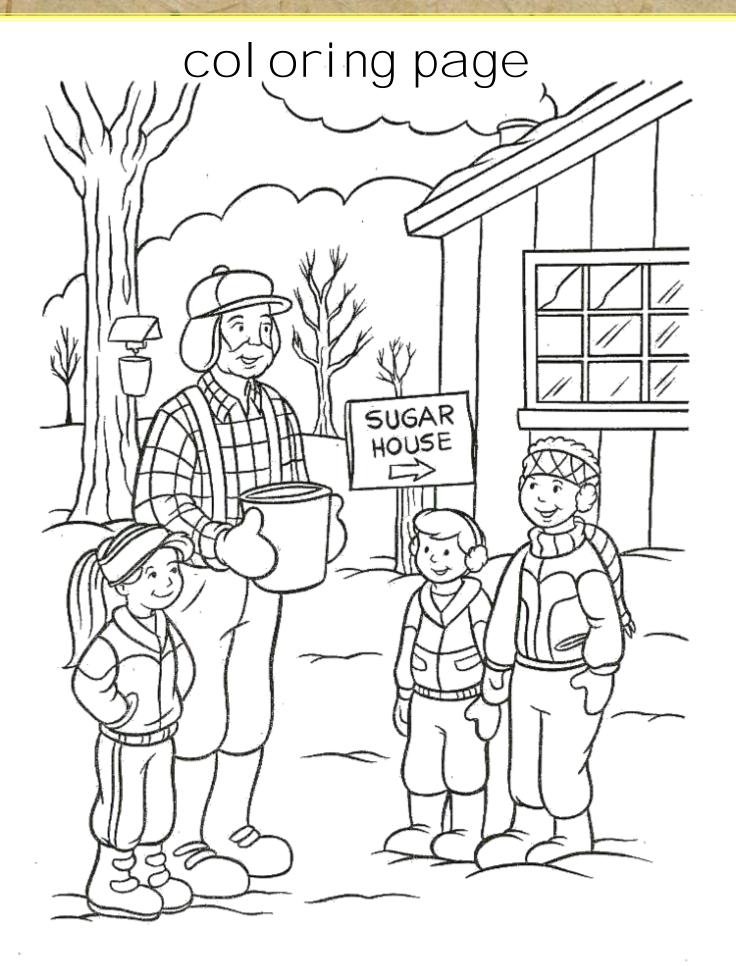


Maybe you have a sugar maple tree in your yard.

The leaves look like this.

coloring page

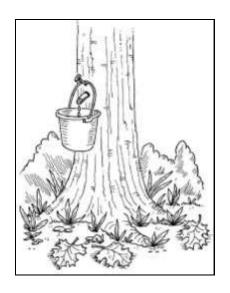
Maple syrup is made from a slightly sweet liquid, called sap. It comes from inside of sugar maple trees. The sap runs through the inside of the tree, just beneath the bark, in late winter or early spring when the nights are below freezing and the days are mild.

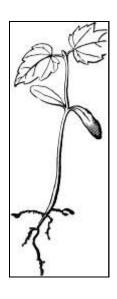


" Welcome to our sugarhouse! Do you know what maple syrup is?"

### Put things in Order

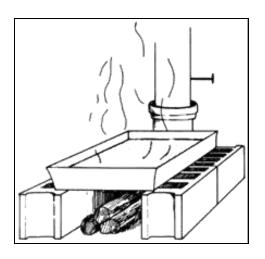
Review what's in the pictures and color them in. Then cut out and arrange, or draw arrows between, each stage to show start to finish.





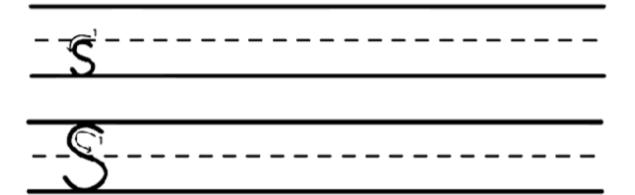






### Practice your Letters





What is in this picture that starts with the letter S?

### Read a Book

Check out these children's fiction and non-fiction books on Maple.

Carney, Margaret. *At Grandpa's Sugar Bush*. Kids Can Press, Limited. 1998. ISBN-13: 9781550743418

Fischer, Jean. *Welcome to Our Sugarhouse*. Pyramid Publishing Inc. 2002. ISBN-13: 9781885920775 (Coloring book pictures were from this book.)

Haas, Jessie. *Sugaring*. Harper Collins Publishers. 1996. ISBN-13: 9780688142001

Isaacs, Anne. *Pancakes for Supper!* Scholastic, Inc. 2006. ISBN-13: 9780439644839

Janson, Leora Sipp. *Logan Learns All about Maple Syrup.* Trafford Publishing. 2012. ISBN-13: 9781466916845

London, Jonathan. *The Sugaring-Off Party.* Fitzhenry & Whiteside, Limited. 2006. ISBN-13: 9781550415964

Mitchell, Melanie. *From Maple Tree to Syrup* (Start to Finish Series). Lerner Publishing Group. 2003. ISBN-13: 9780822513902

Purmell, Ann. *Maple Syrup Season*. Holiday House, Inc. 2007. ISBN-13: 9780823418916

Rossiter, Nan Parson. *Sugar on Snow.* Penguin Young Readers Group. 2003. ISBN-13: 9780525469100

Snyder, Inez. *Sap to Syrup*. Scholastic Library Publishing. 2005. ISBN-13: 9780516255309