## Book and Bake: Easy as Pie

Leader introduction: "Book and Bake" is designed for all ages. Teens or 'tweens read to and assist with pre-K to $3^{\text {rd }}$ graders. Call on your local senior center, Junior League, 4-H, or FCCLA chapter to lend a hand.

- Divide into teams. Each team will make two small pies. Bake pies on large baking sheets for easier handling.


## Once you've settled on who is helping whom, allow about two hours for this activity OR make the crust Day 1 and bake the pie Day 2.

## Activity Outcomes:

- Apply literacy skills; reading and following directions
- Connect with historical characters, language and events
- Place types of pie with their geography
- Use baking science to find the best flour for pastry
- Develop eye-hand coordination; measure, stir, "cut in, "roll out" pie pastry
- Build family relationships and community
- Evaluate the health benefits of pie and baking it yourself


## Getting started: Ask your group what their favorite pie is.

You may be surprised-there are so many fillings and types...tarts, pizza, empanadas, pasties, fruit, cream, pork, chicken, lamb or beef pot pie,quiche

Activity \#1: Pie Geography Use a large U.S. map and sticky paper strips. Write a pie name from below on a strip, one per team. Stick it to the state or region famous for this type of pie.
Funeral Pie - Ohio, Indiana, Illinois (Raisin custard one-crust pie, Amish)
Apple Pie - Massachusetts, New Jersey, New York
Blueberry - Maine, Michigan
Cherry - Michigan and Washington
Empanada - New Mexico, California, Texas
Key Lime - Florida
Sour Cream Gooseberry - Missouri, Arkansas, Southern Illinois
Blackberry Pie - Oregon and Washington
Rhubarb Meringue - Iowa, Minnesota, Wisconsin, Rhode Island
Shoofly Pie - Pennsylvania (German, Pennsylvania Dutch)
Sweet Potato Pie - Mississippi, Alabama, Georgia
Meat Pastie or Pasty- Michigan
Chess Pie - New England states and the Southern states
Pecan Pie - Georgia, Louisiana, Texas, Oklahoma, southern Kansas
Peach Pie - Georgia
Pumpkin Pie - Delaware, Massachusetts, Rhode Island
Strawberry Pie-California, Florida, plus anyone growing strawberries!

Pie Factoids
"Pie" was first used with
a) apple pie
b) pumpkin pie
c) meat and cheese pie

A: c-savory pies, not sweet pies were most often eaten

The word pie was used in everyday language by
a) 793 A.D.
b) 1362
c) 1854

A: 1362 (At this time Vikings were exploring N. America and the Ottoman Empire had reached Europe)

The term "pot pie" first appeared in print in America in 1785. This was during
a) The Revolution
b) The Civil War
c) Spanish- American War

A: A-"Pot pie" was an English staple. The pastry was made very tough! It was the cooking "pot" for a stew.

Both Shepherds and cottage pie are
a) topped with pastry
b) fruit pies with lattice
pastry on top
c) meat pies topped with mashed potatoes

Pie pastry originated with
a) Greeks
b) Romans
c) English

A: A-Greeks passed pie on to Romans and Egyptians

Open crust pastries were called "traps." They called those with "lids" (top crust)
a) casseroles
b) coffins (coffins)
c) funeral pie

A: b-tall, straight-sided pie with a sealed-on lid

America's favorite pie is
a) cherry
b) pumpkin
c) apple

A: c-apple

Activity \#2: Book it! Do a search at the library! Choose a story to read with younger children before beginning to bake. Consider Eating the Alphabet or Pie in the Sky by Lois Ehlert or read an excerpt describing tarts from Red Wall by Brian Jacques.

Activity \#3: Pastry Science In the "olden days" meat pot pie pastries were made to be tough. It's said a wagon could drive over it without it breaking! These tough pastries doubled for a pot in which to bake meat stews! Today, we like a tender flaky pastry and use a pan to support it!

Problem: What wheat flour is best for making a tender pastry?
How much protein is in the flour will make a difference in how tender a pastry is. Higher protein flour absorbs more moisture and develop strands of gluten as it's mixed and handled. (Gluten = two proteins-glutenin and gliadin)

Wheat flour $=$ all purpose, whole wheat, pastry flour bread flour cake flour

What you'll need: 5 bowls, five kinds of flour-bread, cake, all purpose, pastry and whole wheat; liquid and dry measuring cups OR food scales; water Problem: Which of these flours is higher in protein and would make a tough pastry?

## Experiment \#1:

1. Place 1 cup $(4 \mathrm{oz} / 115 \mathrm{~g})$ of each type of flour in a separate bowl:
bread, all purpose, whole wheat, pastry, and cake or "cookie" flour
2. Stir in $\frac{1}{4}$ cup ( $2 \mathrm{oz} / 60 \mathrm{ml}$ ) water, stirring 1 minute for each mixture. Results: (The stiffer the dough, the more protein.)
--Rank the flours, most protein to least.
--Label each bowl: bread flour, all purpose, pastry, or cake flour Which one(s) would provide the least tough or most tender pastry crust?

Pastry flour is available from Bob's Red Mill, StoneBuhr, King Arthur or at local whole food markets. See links at www.homebaking.org

## Experiment \#2: The type of fat used will also make a difference in how

 tender a pastry is. Cold solid fats like butter and shortening make layers of the flour and make it more tender than using vegetable oil. Try it! Have teams make pastry with some using cold butter, some vegetable shortening and some the oil pastry. Like retro recipes? Use lard! Describe the results.See how to "cut in" butter on a Baker's Dozen Lessons for
Better Baking, www. homebaking.org
Also: View pie crust preparations at www. landolakes. com
Click on Tips and Techniques and then Baking Demonstrations

Activity \#4: There's a pastry for every level of experience: Press-in, Rustic, Rolled or Oil Read the recipe step by step together! Assemble ('mise en place') tools \& ingredients. TIP: Frozen fruit sold in bags may be substituted for fresh fruit as needed. Instant pudding layered with sliced fresh fruit may be a great "first filling" for a baked single crust pie.

Butter Pie Crust -Makes 1, double-crust 9-inch pie or two, single-crust pie shells Ingredients
2 cups pastry flour* (stirred and spooned into dry measuring cup; level off)
2 tablespoons powdered sugar (optional)
1 teaspoon salt
$\frac{3}{4}$ cup ( 6 oz. $/ 1 \frac{1}{2}$ sticks) unsalted butter, cut into pieces
2 teaspoons cider vinegar
5 tablespoons ice water
*Pastry flour may be whole wheat or enriched flour, or half of each. Pastry flour is produced from a lower protein soft wheat than all purpose flour and makes a more tender crust than higher protein flour.
*All purpose flour may be substituted if necessary, replacing $\frac{1}{4}$ cup of the flour with $\frac{1}{4}$ c. corn starch
Directions:

1. In a medium bowl, whisk together the flour, powdered sugar (opt.) and salt.
2. Cut butter into pieces and scatter on top of the flour mixture.
3. Using a pastry blender or food processor, cut the butter into the flour until it's in little pea-sized pieces throughout the flour.
4. Stir the vinegar into the ice water. Sprinkle the ice water over the flour mixture, tossing with a fork, until the mixture begins to look crumbly. (But not wet or sticky.)

Press-in crust (no rolling required): For one-crust pies: Divide the mixture between two, 9 -inch pie pans or four small tins; press firmly into the bottom of each pan and up the sides, making sure it covers the whole pie pan. Prick the pastry with a fork about 1 -inch apart before baking. (Prevents crust from bubbling up).
OR, line pastry with foil and spread dry beans in bottom.
Fill or pre-bake crust in preheated oven as recipe directs.
Country "Rustic" Pie: Press the dough into a disk, flatten to about $1 \frac{1}{2}$-inches thick and wrap with plastic food wrap. Freeze pie pastry 30 minutes or refrigerate 4 hours or overnight before rolling out. Roll into a 12 to 14 -inch circle and place on ungreased baking sheet pan. Place fruit filling in center of crust, dot with butter and pull crust up 2 to 3 inches over the filling, overlapping edges of dough all around the circle. Press gently to keep in place; leave a $4-5$-inch center circle open.
Oil Pastry: 1 cup flour, 2 T. powdered sugar, $\frac{1}{2}$ tsp. salt-Blend well. 6 tablespoons oil, $2 \frac{1}{2}$ T. cold milk
With pastry blender gradually add oil to flour mixture until small clumps form.

## Country Fruit Pie

$\frac{1}{2}$ cup brown sugar
$\frac{1}{4}$ cup cornstarch
1 teaspoon cinnamon
Pinch ground nutmeg $2 \frac{1}{2}$ cups peeled and sliced green or tart pie apples $1 \frac{1}{2}$ cups tart frozen or fresh cherries
1 Tbsp. Lemon juice
1,9-in country/rustic pie crust
5 Tbsp. cold butter, cut into $\frac{1}{2}$-in. pieces Mix sugar, cornstarch, spices, fruit, lemon juice. Place in pie crust on baking pan. Dot with butter. Fold up crust around fruit. Bake at $375^{\circ}$ F., $40-50$ minutes. Add milk a little at a time, tossing to moisten. Form a ball, adding a little more milk only if necessary. Roll or press in pan(s). Makes one, 9-in. or two, 4-in. single-crust pies.

Rolled Pie Crust: $\$ \$ \$$ TIP: Have the hardware supply store cut thick dowel rods into 12 -inch lengths; sand ends, wash in soapy water, rinse, dry and oil with cooking oil.
Form dough into a disk shape and wrap in plastic wrap.
--Refrigerate 4 hours or overnight OR freeze until firm (about 20-30 minutes)
--Lightly flour the pastry disk; cut in half. Roll the crust into a 12 -inch circle.
(May want to roll out pastry between two floured sheets of waxed paper for easier handling.)

--Fold or roll the pastry over the rolling pin and gently lay over and down into a 9 -inch pie pan.
Ease the bottom crust into the pie pan and trim edges.
--Fill bottom crust and top with a second circle of pastry. Make slits in the center of top crust to let out steam. --OR, use a pastry cutter and cut strips of pastry to weave a lattice top.

Artists touch: Use small cookie or pastry cutters to cut leaf, flower, heart or other small pastry shapes to lay on top of the top crust.


- Glaze top crust and shapes with an egg wash $\rightarrow$ Whisk 1 egg and 1 tablespoon ice water until yellow-colored. Brush egg wash over top crust and shapes and bake.
- Add sparkle: Brush crust with cream or milk; sprinkle with sugar and bake.

A Slice of Wellness: Cooking is part of an active lifestyle! Pluse for each pie ingredient used, explore the vitamin, mineral and other nutrients it supplies your body.
Visit web-sites listed for its related nutrition or health information!

- Whole wheat and enriched pastry flours www.wheatfoods.org
- Fruit (blueberry www.blueberry.org , cherry, www.cherrymarketing.org Fruit juices (lime, lemon) www.sunkist.com
- Fruits and Vegetables (apples, pumpkin) www.5ADay.org
- Eggs: custards, meringues, quiche www.aeb.org
- Pecans, hazelnuts, walnuts, peanuts www.nuthealth.org
- Butter, milk www.nationaldairycouncil.org

It's no small wonder that all six colors of the MyPyramid include pie ingredients! Check each slice out @ www.mypyramid.gov


Serve it UP. Sharing skills helps confirm what you learn.
Plan a way to share what you can do with someone else... here are some starting points:
Family Night. Bake with a parent, sister, brother, cousin, aunt, grand parent...learn to bake a family favorite pie. Check out www.bakeforfamilyfun.org for more great ideas. Bake Sales for Local Benefits. Check out how to raise more for a local concern at www.homebaking.org High Yield Bake Sales. Hold a Great American Bake Sale in your city. www.greatamericanbakesale.org
Bake and Take. Bake small pies for neighbors, friends or someone you could
 share an hour of your time with and a slice of pie. Information @ www.bakeandtake.org Prepared By Sharon Davis, Family \& Consumer Sciences Ed. www.homebaking.org

