Pastry Pizazz!

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Lesson Summary: Tender, flaky pastries are a perfect partner to any pie or tart filling. We’ll learn about different kinds of pastries and how to prepare them ourselves. Then we’ll bake a variety of pies to donate to our community.

Lesson Objectives:
1. Identify key pastry ingredients, their functions, ratio (3-2-1) and how to prepare types of pastries
2. Measure ingredients accurately and apply baking food safety steps to prepare pastries in food preparation labs
3. Bake pies to donate to the American Legion or other local group in the community

Baking Flour Food Safety poster and video: namamillers.org/consumer-resources/consumer-food-safety/

Baking Food Safety 101 check-list and internal temperature chart to assess food safety steps: homebaking.org/baking-food-safety/

Chef Martin Earl video “The Importance of Temperature in Baking” (9 min) for both food safety and quality baking outcomes: thermoworks.com/home-baking-association/

How to Measure Dry and Liquid Ingredients; Scoop, Spoon, Scale activity: homebaking.org/getting-started/

Safe Recipe Style Guide: saferecipeguide.org/ You can assign students to insert the baking food safety steps needed in the recipe(s) used in lab.

Why Bake in Glass? Download this infographic and learn about U.S.-made glass bakeware and its pie baking benefits.

Need a benefit idea? Check out Bake Sale for No Kid Hungry Rock Stars and Resources to assist your pie baking benefit. bakesale.nokidhungry.org/ Consider a savory hand-held pie, like Empanadas, for individual sales.

This lesson supports these learning standards and objectives:

National Standards for Family and Consumer Sciences Education leadfcsed.org/national-standards.html

8.0 Food Production and Services
8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.
8.5.10 Prepare breads, baked goods and desserts using safe handling and professional preparation techniques.
Day 1: Introduction to Pastries
1. Assign, read and discuss Ch 21–Baking, FOOD FOR TODAY, pgs 579-586.
2. Students will do the Pastry Vocabulary sheet, using the glossary at homebaking.org/glossary/.
3. Explore the Chef’s Choice Best Pie Recipes at Domino Sugar’s corporate test kitchen dominosugar.com/pie-recipes and C&H Sugar’s Pie making tips chsugar.com/recipe-result?filter_by_tid=955&type=tips

Day 2: Pastry Pizazz
1. Share and hand in the Pastry Vocabulary assignment.
2. Watch the “Pastry & Pies” slides presented by the teacher and complete the Pastry and Pies Study Guide assignment.
3. Read the Flour Food Safety Infographic or view the 1-minute video at namamillers.org/consumer-resources/ and discuss.
4. Demonstrate or confirm they know how to accurately measure flour, liquids using volume and scale methods.

Day 3: Pastry Pizazz
1. Share and discuss the Pastry and Pies Study Guide assignment.
2. Share and discuss the Troubleshooting Pastries With Pizazz sheet in class.
3. Play “Pastry Pizazz” Kahoot to learn pastry facts and fiction.
4. EXTRA! Assign students to view “cutting in” video, homebaking.org/glossary/#c. They may also review “How to Make a Lattice Pie Crust.” chsugar.com/baking-tips-how-tos/how-to-make-perfect-pies-and-tarts/how-to-make-lattice-pie-crusts

Day 4: Pastry Pizazz
1. Use the Foods Lab Planning sheet to work in groups to plan 2 pie labs. See Pastry Recipes With Pizazz recipe sheets. The class will be using donated ingredients to make pies to donate to the Howells American Legion Post #155 annual turkey supper as a community fundraiser, or select another local beneficiary. They may also plan a bake sale for Bake for No Kid Hungry, bakesale.nokidhungry.org/; sale support resources are provided.
2. Do the Pie Puzzler assignment to unscramble the many types of pies available. Post/share The United State of Pie wheatfoods.org/wp-content/uploads/2019/06/TheUSofPie.pdf to identify what pies are most popular where!
OPTIONAL: Assign students to learn some pie history such as Pie Factoids, Easy as Pie, homebaking.org/wp-content/uploads/2019/05/easyas_alphabetpie.pdf.

Day 5: Pastry Pizazz
1. Hand in the Pie Puzzler assignment.
2. Working in groups in the foods lab, students will prepare and bake pies to donate to the American Legion. Pies will be covered and stored properly when cooled.

Day 6: Pastry Pizazz
1. Students will work in groups to prepare and bake pies to donate to the American Legion or chosen benefit. Pies will be covered, properly stored and stored or delivered to the American Legion later in the day.

Day 7: Pastry Pizazz Evaluation
1. Students will discuss and write about what they learned about baking pies and describe the experience on the What Did You Learn? sheet.
2. Working in groups, students will plan a pastry lab using the Pastry Recipes With Pizazz recipes to make the pastry of their choice.

Day 8: Pastry Pizazz Lab
1. Students work in groups to prepare the pastry of their choice.
2. Review for the Chapter 21 Test.

Day 9: Pastry Pizazz Finale
1. Take the Chapter 21 Test.
2. Sample and evaluate the pastry made in lab on Day 8, using the Foods Lab Evaluation sheet.
Pastry Vocabulary

Name: ANSWER KEY  Date: Points: /15

Learn more! Do you grow wheat locally? How is flour milled? namamillers.org/consumer-resources/ What are the six wheat classes and the flours made from them? wheatfoods.org/resources/infographics/

Instructions: Go to homebaking.org/glossary/. Use the glossary to define the following pastry terms.

1. All-purpose flour  Wheat flour milled from hard wheat or a blend of soft and hard wheat. Used in homes for some yeast breads, quick breads, cakes, cookies, pastries and noodles.

2. Butter  Produced by churning cream into a semi-solid form. By U.S. standards definition, it is 80 percent milk fat, with the remaining 20 percent consisting of water and milk solids. Butter for baking may be salted or unsalted.

3. Cut-in  To distribute a solid fat (shortening, butter, lard) into flour using a pastry blender (up and down motion), or two knives (crisscross motion), until fat is divided evenly in the flour in pea-sized or smaller pieces. A food processor and steel blade may also be used.

4. Dot  To place small dabs or pieces of butter or batter over the surface of a food, such as with a pie, just before the top crust is added and baking begins.

5. Flaky  Distinct layers of pastry or biscuit formed by using low protein flour, fat, and by not too much mixing.

6. Margarine  Developed as a butter substitute in the late 1800s, margarine is 80% vegetable oil, 20% is liquids. May be salted or unsalted. Margarine is no longer made with partially hydrogenated oils (PHOs); commonly made from soybean, corn, palm, canola, or olive oil.

7. Meringue  Stiffly beaten egg white and granulated sugar that may be soft or baked hard.

8. Oils  Fats come from two sources–plant or animal. Vegetable oils are plant-based and liquid at room temperature.

9. Pastry blender  Hand-held U-shaped tool with 5 or 6 sturdy parallel wires used to “cut” cold butter or fat into smaller pieces into a flour mixture without melting or smearing the butter or fat.

10. Pastry flour  Fine-textured flour produced from soft red or white wheat and 8-9% protein; may be bleached, unbleached, or whole wheat.

11. Pie  A sweet or savory dish made with one or two crusts and filling (pudding, fruit, meat or vegetables).

12. Pie plate  Typically a 9” or 9.5” round slanted dish made of glass. Glass heats slowly, bakes evenly, browns bottom pie crusts beautifully to prevent a soggy bottom crust and allows you to see pie while baking.


14. Vegetable shortening  Made from a blend of vegetable oils that have been hydrogenated. Adding hydrogen to the heated oils converts the liquid oil to a semi-solid. Shortening is shelf-stable at room temperature. It has a high melting point. Since the oils are fully hydrogenated rather than partially hydrogenated, there are no trans fats present.

15. Water  Very hard water and soft water create problems for baked goods. Tap water of medium hardness and without noticeable chlorination or other off odors is suitable. Bottled water may be used in very hard water regions.
Pastry and Pies Study Guide

Instructions: Answer the following questions while watching the Pastry and Pies slides.

1. Pastry is made of layered or flaky dough that can be used to make a variety of desserts, tarts, and, of course, pie crusts.

2. A pie crust that is pricked, baked separately and filled later is a _______ pie ______ shell ________.

3. A type of pie where the bottom crust and filling are baked together is a _______ single ________ crust pie.

4. The type of pie that has bottom crust, filling, and top crust baked together is a _______ double ________ crust pie.

5. What are the 4 main pastry ingredients?

   ______ flour ______

   ______ salt ______

   ______ fat – may be shortening, butter, lard ______

   ______ water ______

6. Basic Pie Crust is called _______ 3-2-1 ________ dough.

7. Making the pastry begins by measuring flour and salt into the mixing bowl. Add fat and use a _______ pastry _______ blender ________ to “cut in” the fat, until the crumbs are the size of small peas.

8. Next, add cold _______ water ________ and toss with a fork to moisten. Form the pastry into a ball.

9. When rolling the dough with a rolling pin, roll from the _______ center ________ outward.

10. When placing the dough into the pie pan, avoid _______ stretching ________ the dough.

WHAT IS 3-2-1 PIE CRUST MATH?

The pastry ratio of “3-2-1” is easy to remember and easy to produce!

What does “3-2-1” mean?

By weight, the pastry dough is 3 parts flour, 2 parts butter or fat, and 1 part ice water.

By volume (if kitchen scales are unavailable) for a 9-inch single crust, 1 1/2 cups flour (6 oz/180g), 1/2 cup cold butter or fat (4 oz/120g); and 1/4 cup ice water (2 oz/60g).
11. When making a pie shell, the pastry should be **pricked or docked** with a fork before baking.

12. **Cream** pies are made by preparing a cooked filling and pouring it into a baked pie shell.

13. A **meringue** pie is made by topping the cooked filling with a mixture of beaten egg whites, sugar and other ingredients, then baking to brown the meringue.

14. To finish a double-crust pie, you can glaze it with milk and sprinkle it with sugar before baking. Cut **vents** in the top of the pie to allow steam to escape.

15. Strips of aluminum **foil** around the edges of the crust will help prevent too much browning. Remove the strips 15 minutes before the end of the baking time.

16. A **lattice** crust is made by weaving strips of pastry over the top of a pie.

17. A **tart** is a pastry dish usually filled with a sweet topping that has no top crust.

18. The roll-in-dough method is used to make **puff** pastries.

19. **Phyllo** dough consists of paper-thin sheets of pastry.

20. **Choux** dough is made from flour, butter, water and eggs and is used to make eclairs and cream puffs.

21. **EXTRA!** Which type of pie pan will bake the crispest crust?
   
   A) lightweight aluminum foil
   
   B) glass
   
   C) aluminum
**Pie Puzzler**

**Instructions:** Unscramble the following letters to find a variety of flavors of pie. Then, using the United State of Pie handout, identify the states where each of the type of pie is most popular.

<table>
<thead>
<tr>
<th>Type of Pie</th>
<th>State</th>
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</thead>
<tbody>
<tr>
<td>2. YREHCR</td>
<td>Cherry</td>
</tr>
<tr>
<td>3. ELKABYCRBR</td>
<td>Blackberry</td>
</tr>
<tr>
<td>4. APNEPLPEI</td>
<td>Pineapple</td>
</tr>
<tr>
<td>5. RCYRANBER</td>
<td>Cranberry</td>
</tr>
<tr>
<td>7. RBYBUELER</td>
<td>Blueberry</td>
</tr>
<tr>
<td>9. NKIPUPM</td>
<td>Pumpkin</td>
</tr>
<tr>
<td>10. BHRARUBR</td>
<td>Rhubarb</td>
</tr>
<tr>
<td>11. CONCTUON REMAC</td>
<td>Coconut Cream</td>
</tr>
<tr>
<td>13. PPAEL</td>
<td>Apple</td>
</tr>
<tr>
<td>14. MENLO IGRENEMU</td>
<td>Lemon Meringue</td>
</tr>
<tr>
<td>15. AHECP</td>
<td>Peach</td>
</tr>
<tr>
<td>16. HCCSOTTEBURT</td>
<td>Butterscotch</td>
</tr>
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<td>17. UPML</td>
<td>Plum</td>
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<tr>
<td>18. SREWYRABTR</td>
<td>Strawberry</td>
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<tr>
<td>19. ANANBA MERCA</td>
<td>Banana Cream</td>
</tr>
<tr>
<td>20. SRERABYRP</td>
<td>Raspberry</td>
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