



## Bpp module 3

Technology and livelihood education (Titay National High School)



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# Bread and Pastry Production

Quarter 1 – Module 3:  
Prepare Pastry Products

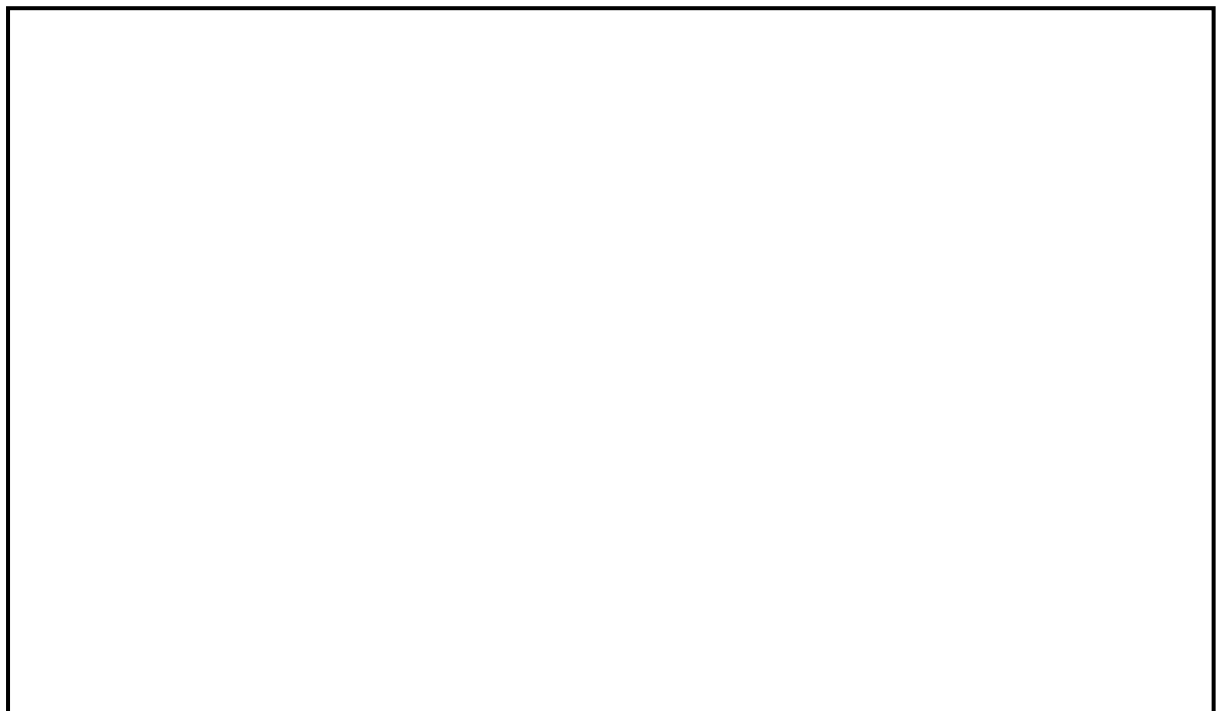
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**Alternative Delivery Mode**  
**Quarter 1 – Module 3: Preparing Pastry Products**  
**First Edition, 2020**

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Published by the Department of Education  
Secretary: Leonor Magtolis Briones  
Undersecretary: Diosdado M. San Antonio



# Bread and Pastry Production

Quarter 1 – Module 3:  
Prepare Pastry Products



# Introductory Message

For the facilitator:

Welcome to the Bread and Pastry Production 11 Alternative Delivery Mode (ADM) Module on Preparing Pastry Products!

This module will serve as the learner's path to discovering the WHAT and HOW of preparing pastry products.

This module was collaboratively designed, developed and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Furthermore, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the learner:

Welcome to the Bread and Pastry Production 11 Alternative Delivery Mode (ADM) Module on Preparing Pastry Products!

Welcome to this module in Preparing Pastry Products. This module was designed to teach you how to prepare pastry products specifically pie crusts and pizza doughs. This will help you discover and learn the different kinds of pastry products from pastry basics to tarts and special pastries.

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning resource while being an active learner.

This module has the following parts and corresponding icons:



***What I Need to Know***

This will give you an idea of the skills or competencies you are expected to learn in the module.



***What I Know***

This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correct (100%), you may decide to skip this module.



***What's In***

This is a brief drill or review to help you link the current lesson with the previous one.



***What's New***

In this portion, the new lesson will be introduced to you in various ways such as a story, a song, a poem, a problem opener, an activity or a situation.



***What is It***

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



***What's More***

This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module.



***What I Have Learned***

This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.



***What I Can Do***

This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.

This is a task which aims to evaluate your



### **Assessment**

level of mastery in achieving the learning competency.



### **Additional Activities**

In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned. This also tends retention of learned concepts.



### **Answer Key**

This contains answers to all activities in the module.

At the end of this module you will also find:

### **References**

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it!



## ***What I Need to Know***

This module was designed and written with you in mind. It is here to help you master the essential knowledge and skills in preparing pastry products. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

The module is composed of the following:

**Unit of Competency:** Prepare and Produce Pastry Products

**Module Title:** Preparing Pastry Products

**Learning Competencies:**

**Learning Outcome 1:** Prepare Pastry Products

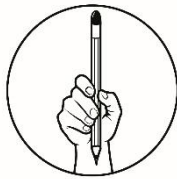
**Lessons/Contents:**

- Culinary Terms Related to Pastry
- Measurement, Selection, Weighing and Substitution of Ingredients
- Kinds of Pastry
- Mixing Techniques
- Tools Used in Pastry Making
- Product Characteristics
- Baking Temperature

After going through this module, you are expected to:

1. select, measure and weigh required ingredients according to recipe or production requirements and established standards and procedures;
2. prepare variety of pastry products according to standard mixing procedures/formulation/recipes and desired product characteristics;
3. use appropriate equipment according to required pastry products and standard operating procedures;
4. bake pastry products according to techniques and appropriate conditions; and enterprise requirements and standards; and
5. select required oven temperature to bake goods in accordance with the desired characteristics, standards recipe specifications and enterprise practices





## What I Know

*Are you ready to learn different pastry products that you can sell to your friends and neighbors?*

*Let's see how much you know about them by answering this pre-test.*

**Directions.** Read the questions carefully. Write the best answer on a separate answer sheet. Then, self-check your answer using the answer key found on the last page of this module. A 100% score means you can skip this module, but below 100% means you proceed to this module. Be honest to ensure that absolute learning takes place.

1. How do puff and flaky pastries rise?
  - a. by adding baking powder into the mixture
  - b. by combining baking soda into the mixture
  - c. by mixing eggs as its leavening agent
  - d. by using steam as its raising agent
2. Which of the following is NOT a contribution of fat to the pastry?
  - a. it adds flavor
  - b. it acts as a spacer
  - c. it lubricates and tenderized
  - d. it makes the dough rise
3. Why is it important to place the measuring cup in a flat surface when measuring liquid ingredients?
  - a. to avoid the liquid to spill
  - b. to get the accurate measurement
  - c. to practice occupational health and safety
  - d. to be able to hold the liquid container properly
4. How many ounces of all-purpose flour is equivalent to 4  $\frac{1}{2}$  cup of it?
  - a. 16  $\frac{1}{2}$  oz
  - b. 17oz
  - c. 18oz
  - d. 18  $\frac{1}{2}$ oz
5. Ana ran out of granulated sugar. She needs a cup of it to complete her ingredients in baking pastries. Which of the following can be used as a substitute to it?
  - a. a cup of table sugar
  - b. a cup of powdered sugar
  - c. a cup of confectioner's sugar
  - d. a cup of tightly packed brown sugar
6. Why is pâte sablée called a 1-2-3 dough?
  - a. because it contains 1 part fat, 2 parts sugar, 3 parts flour
  - b. because it contains 1 part flour, 2 parts sugar, 3 parts fat
  - c. because it contains 1 part sugar, 2 parts fat, 3 parts flour
  - d. because it contains 1 part sugar, 2 parts flour, 3 parts fat
7. Which of the following kinds of pies describes itself correctly?

- a. Cobbler is an American deep-dish fruit dessert or pie with a thin crust and fruit filling.
  - b. Mincemeat is a mixture of chopped dried fruit, distilled spirits and spices, and sometimes beef suet, beef, or venison.
  - c. Pizza is an oven-baked, flat, disc-shaped biscuit crust usually topped with tomato sauce and mozzarella cheese.
  - d. Shepherd's pie consists of a layer of ground meat and an overload vegetables topped with a creamy layer of mashed potatoes.
8. How do we apply the creaming method?
- a. by beating fat and sugar together until light and airy texture
  - b. by folding fat repeatedly into the dough
  - c. by mixing all ingredients together usually in a circular motion
  - d. by whipping the ingredients to incorporate air into the mixture
9. Which of the following pastries is matched correctly?
- a. pâte brisée = sugared dough
  - b. pâte sablée = crumbly dough
  - c. pâte sucrée = broken dough
  - d. pâte à choux = sandy dough
10. Which type of meringue is generally used to make crisp, baked shells?
- a. Basic Meringue
  - b. French meringue
  - c. Italian meringue
  - d. Swiss meringue
11. How much filling will you use if your pan is 8 inches?
- a. 26 - 30 oz
  - b. 32 - 40 oz
  - c. 41-50 oz
  - d. 51 - 60 oz
12. Why pâte brisée is also known as sablage?
- a. because it is laminated and rolled in
  - b. because it contains even more fat and less egg and other moisturizers
  - c. because it contains higher amount of sugar which tenderizes the dough
  - d. because it contains fat and flour being combined until the mixture is similar to a coarse meal or sand.
13. Which oven temperature is best for a two-crust pie with cooked filling?
- a. 350°F to 425°F
  - b. 400°F to 425°F
  - c. 425°F to 450°F
  - d. 350°F to 425°F
14. How long would you bake a shell?
- a. 8-10 mins
  - b. 10-12 mins
  - c. 12-15 mins
  - d. 15-18 mins
15. Which of the following statements describes japonaise correctly?
- a. It can be filled and iced with ice cream
  - b. It is a special meringue containing nuts.
  - c. It can be filled with chocolate mouse and butter
  - d. It is a flavorful mixture usually made into rectangular shape

# Prepare Pastry Products

In this lesson, you will learn the different pastry products from basic pastries to tarts and special pastries. Likewise, you will be able to improve the essential baking skills that you've acquired in the previous lesson. The activities in this lesson are focused on the production of dough which is an initial step towards advanced skills in pastry making. The skill should be mastered before applying them to more complicated pastry desserts.



## ***What's In***

*Now that you've learned how to bake bakery products, let us advance to some more delicate baked products – pastries. But before that, let us have a review by filling out the graphic organizer below.*

### **Bakery Products**

<b>Yeast Products</b>	<ul style="list-style-type: none"> <li></li> <li></li> <li></li> </ul>
<b>Quick Bread</b>	<ul style="list-style-type: none"> <li></li> <li></li> </ul>
<b>Cookies</b>	<ul style="list-style-type: none"> <li></li> <li></li> <li></li> <li></li> </ul>



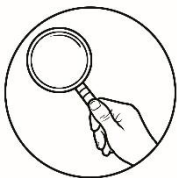
## What's New

*In the previous competency, you've learned to bake bakery products. Now, it's time for you to advance to the next level. Let's reveal it by doing this activity.*

<b>Column A</b> Arrange the letters below to form words relative to baking.	<b>Column B</b> Write the letters represented on each number to the corresponding boxes below.																																																									
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Follow Up Questions:

- Do you wish to create a business opportunity for you and your family?
- Have you ever wished to bake your specialty?
- What particular pastry product would it be?
- If you are to name it, what would it be?



## What is It

*Now that you're excited to learn the WHAT and HOW of pastry making, let us read the lessons below to be equipped with the necessary knowledge and essential techniques in baking pastries.*

### Culinary Terms Related to Pastry

Flaky – breaking easily into small pieces

Dough – a mixture of flour, water, and other ingredients

Crumbs – crushed pieces of bread

Crust – the shell of a pie

Filling – can be a cream, paste, fruit; anything used to fill something; something in between

Docking – pricking a pie crust with tines of a fork to allow the steam to escape to avoid the crust to puff up in the oven

## Measurement, Selection, Weighing and Substitution of Ingredients

In making a good pastry, one must observe the proper measurement of ingredients. Accuracy of ingredients is an essential part of achieving the right consistency and taste of pastry products. By following the measurement of ingredients, you can be confident that you will achieve your desired output.

Basic Pastry Ingredient	How to Measure	Baking Tools
<p>1. <b>Flour</b> – Flour from wheat is indispensable to pastry making because of its gluten content that makes the dough to be stretched and expand inside the oven. Strudel and phyllo dough requires strong and high gluten bread flour to stand stretching to form thin sheets. For a rich short crust and refrigerator dough, flour from soft wheat or pastry flour is advised. All-purpose flour, on the other hand, is best for a regular short crust and choux pastry for its high gluten making the dough resilient but still tender.</p> <p>In producing tender puff pastry, a mixture of all-purpose flour and low-gluten cake flour is recommended.</p>	Sift the flour to remove lumps. Fill the cup to overflowing then level-off with a spatula or with a straight edge or back of a knife.	Measuring cups Spatula
<p>1. <b>Fat</b> – It plays several important roles in pastry making. Aside from adding flavor, it lubricates and tenderize the pastry. Because it is not absorbed by other ingredients, it also acts as a spacer, which contributes to the flakiness of the pastry. Whatever method of incorporation is used; the fat should be evenly distributed to the</p>	Press the fat into the cup until it is full. Level off with the spatula or with the edge of the knife.	● Measuring cup ● Spatula

mixture.		
2. <b>Liquid</b> – The most commonly used liquids in pastry making is water and milk. It is responsible for the gluten development in the flour. The liquid turns to steam which help the dough to rise during baking. In some recipes, small amounts of cold liquids are used for a purpose.	In measuring the liquid ingredients, the glass or liquid measuring cup is used. Place the measuring glass into a flat surface. Kneel down and pour the liquid ingredient into the cup. Read the measurement at eye level for accuracy.	● Measuring cup or glass (for liquid ingredient)
3. <b>Leaveners</b> – In preparing puff and flaky pastries, steam acts as the raising agent while in choux pastry, the raising agents are eggs plus steam. On the other hand, chemical leaveners such as baking powder and baking soda can be used.	Leavening agents are measured with the use of measuring spoons and is leveled off by a spatula.	● Measuring spoon ● Spatula
4. <b>Sugar</b> – Sugar is a sweet, soluble organic compound that contributes to a rich color of the crust. It also makes the pastry products more tender.	<b>Granulated sugar</b> Sifting the sugar is unnecessary if there are no lumps. Spoon into cup, do not press it down. Level off with a spatula. <b>Brown sugar</b> Pack the sugar into the cup just enough to hold its shape. Level off with a spatula before emptying.	● Measuring cup ● spatula

Table 1. How to Measure Basic Pastry Ingredients. By Author

Sources: Data from Sercado, Virginia C., *Skills for a Lifetime in HOME ECONOMICS* (Valenzuela, Philippines: JO-ES Publishing House, Inc., 2012), 172-173; Department of Education, *Bread and Pastry Production Manual* (Pasig City: Department of Education, 2016), 69.

## Substitution of Basic Pastry Ingredients

There will be occasions when ingredients are not always available. In such instances, the table below will help you continue your baking activity.

<b>Ingredient</b>	<b>Amount</b>	<b>Substitution</b>
Pastry flour	2 cups	1 1/3 cup all-purpose flour plus 2/3 cup cake flour
All-purpose flour	1 cup	1 cup plus 2 tablespoons sifted cake flour
Fats, margarine	½ cup	½ cup salted or unsalted butter
Granulated sugar	1 cup	1 cup tightly packed light or dark brown

		sugar
Milk, evaporated whole	1 cup	1 cup light (30% butterfat) or heavy whipping cream (35% butterfat)
Yeast, active dry	1 envelope	1 tablespoon fast-rising active yeast

*Table 2. Substitution of Ingredients*

Adapted from: "Baking Ingredient Substitution Table." Ingredient Substitution - Joyofbaking.com. Accessed May 20, 2020. <https://www.joyofbaking.com/IngredientSubstitution.html#ixzz3gF7G0H00>.

## Weight Conversion for Common Baking Ingredients

Measuring ingredients by weight is far more accurate than measuring by volume. The following chart shows the conversion for common baking ingredients, per one cup measure.

<b>DRY INGREDIENTS</b>	
<b>Ingredient</b>	<b>Ounces (oz) per cup</b>
All-purpose flour, sifted	40z
Bread flour, sifted	4 ¼ oz
Cake flour, sifted	3 ½ oz
Cocoa Powder, lightly spooned	3 oz
Dry milk powder	4 ¾ oz
Granulated sugar	7 oz

Table 3.1. Weight Conversions for Dry Ingredients

<b>LIQUIDS AND DAIRY</b>	
<b>Ingredient</b>	<b>Ounces (oz) per cup</b>
Milk	8 oz
Buttermilk	8 oz
Heavy cream	8 oz
Sour cream	8 oz
Sweetened condensed milk	10 ½ oz

Table 3.2. Weight Conversions for Liquids and Dairy

## **BUTTER AND FATS**

<b>Ingredient</b>	<b>Ounces (oz) per cup</b>
Butter, 1 tbsp	½ oz
Shortening	6 ¾ oz
Olive oil, canola oil, vegetable oil	7 ½ oz

Table 3.3. Weight Conversions for Butter and Fats

<b>EGGS, raw, large, shelled</b>	
<b>Ingredient</b>	<b>Ounces (oz) per cup</b>
1 large whole egg	1 ¾ oz
1 large egg yolk (1 tbsp)	2/3 oz

Table 3.4. Weight Conversions for Eggs

Source: Department of Education, *Bread*, 72.

## Kinds Pastry Products

Pastries suggests many kinds of baked products made from a mixture of fat, flour and water. It includes a wide range of baked goods such as pies, tarts and special pastries. With pie crust, anyone can make a delicious dessert because many seasonal fruits go well with this. Also, a delicious and mouth-watering pizza can be made by just topping it with a selection of fruits, meat, cheese, vegetables and herbs.

### Pastry Basics

#### 1. Pate Brisée and short pastries

**Pâte brisée** (*pot bree ZAY*). Literally means “broken dough.” Same with the mealy pie dough, it is mixed by combining first the fat with the flour. This is also known as **sablage** (*sah BLAHZH*) or the sanding method in classical pastry. This is because the fat and flour is combined until the mixture is similar to a coarse meal or sand. This is done to avoid the flour to absorb water to limit the gluten development which results to a tender pastry. For a large tart, pâte brisée is used.<sup>1</sup>



**Pâte sucrée** (*soo CRAY*). This means “sugared dough.” Compared to pâte brisée, it contains higher amount of sugar which tenderize the dough. However, high sugar content makes the dough to become fragile and more difficult to handle than pâte brisée. Small items such as tartlets and petit fours uses this dough.<sup>2</sup>



1 “Professional Baking.”

2 “Professional Baking.”



Pâte sucrée can be mixed either by the sablage method or the creaming method. In creaming method, fat and sugar are mixed first. This method is also used for cookies, cakes, and muffins. Both pâte sucrée and, pâte sablée can be used to make plain cookies.<sup>3</sup>

**Pâte sablée** (*sah BLAY*). Pâte sablée is an extremely tender and crumbly dough. Compared to pâte sucrée, this contains even more fat and less egg and other moisturizers. In some formulas, it contains more sugar as well. Pâte sablée is often called a *1-2-3 dough*, because it contains 1 part sugar, 2 parts fat, and 3 parts flour by weight. It can be mixed using the sablage method but today, it is more common to use the creaming method. This dough is generally used for cookies and for small tarts and other pastries. In French, sable means “sand” and its crumbly or sandy texture gives the pastry its name.<sup>4</sup>



## 2. **Puff pastry**

Like Danish and croissant doughs puff pastry (*pâte feuilletée*) is laminated and rolled-in. It is made up of many layers of fat in between layers of dough. Although puff pastry does not contain yeast, steam serves as its raising agent in the oven.<sup>5</sup>



## 3. **Choux pastry**

This is a very light pastry that is often filled with various flavors of cream and is often topped with chocolate. It can also be used as appetizers when filled with cheese, tuna, or chicken.<sup>6</sup>



## 4. **Strudel and Phyllo**

Desserts made of strudel or phyllo dough start out with paper-thin layers brushed with fat and then stacked or rolled up to make many-layered creations. Unlike puff pastries, these doughs are even flakier. *Strudel* is a soft dough made of strong flour, eggs and water originated in Eastern Europe. It uses strong flour to stand stretching by hand to form it into a very thin transparent sheet. This skill takes practice to be done well.<sup>7</sup>



*Phyllo dough* (FEE-lo, sometimes spelled “filo” or “fillo”) This is a Greek version type of paper-thin dough. It is widely used today and is interchangeable for strudel dough although it is not exactly the same as

3 “Professional Baking.”

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strudel. In fact, commercial phyllo is often labeled “phyllo/strudel dough.”<sup>8</sup>

#### 5. **Baked Meringues**

Baked meringues although it may seem odd, is used in many of the same ways as flour pastry. It is bagged out into shapes and baked until crisp. It can be filled or iced with many kinds of creams, icings, and fruits to make an interesting variety of attractive desserts.<sup>9</sup>



Common meringue and Swiss meringue are generally used in making crisp, baked shells. *Japonaise* is a special meringue that contains nuts. This is usually made into round, crisp layers. It can be filled and iced with buttercream, chocolate mousse, whipped cream, or similar light icings and creams.<sup>10</sup>

### **Tarts and Special Pastries**

#### 1. **Tarts**

A tart is an open pastry paste containing a filling. Tarts are light, usually less than 1 inch (2.5 cm) thick, and often colorful. Their appearance usually depends on a pattern of carefully arranged fruit. Tartlets are basically the same as tarts but prepared in individual-portion sizes.<sup>11</sup>

#### 2. **Pies**

Pies are baked dish consisting of fruit, meat, cheese, spices, and others with an upper or under crust or both.

#### **Kinds of Pies**

1. **Pizza** – This is an oven-baked, flat, disc-shaped bread usually topped with tomato sauce and mozzarella cheese and then a selection of meats, salamis, seafoods, cheeses, vegetables, and herbs depending on taste and culture.<sup>12</sup>
2. **Mincemeat** – This is a mixture of chopped dried fruit, distilled spirits and spices, and sometimes beef suet, beef, or venison. Originally, mincemeat always contained meat. Mince pies normally have a pastry top, but there are versions found without top which are known as **mince tarts**. Mince pies are filled with mincemeat—a preserve typically containing apple, dried fruits

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8 Sercado, Virginia C., *Skills for a Lifetime in HOME ECONOMICS* (Valenzuela City, Philippines: JO-ES Publishing House, Inc., 2012), 171.

9 Sercado, *Skills for a Lifetime*, 171.

10 Sercado, *Skills for a Lifetime*, 171.

11 Sercado, *Skills for a Lifetime*, 172.

12 Department of Education, *Bread*, 76.

such as raisins and sultanas, spices, and either suet or vegetable shortening.<sup>13</sup>

3. **Shepherd's pie** – This consists of a layer of ground meat and a few vegetables topped with a creamy layer of mashed potatoes. The dish is baked until the top of the potatoes forms a golden-brown crust.<sup>14</sup>

4. **Cobbler** – Cobbler is an American deep-dish fruit dessert or pie with a thick crust (usually a biscuit crust) and a fruit filling (such as peaches, apples, or berries). Some versions are enclosed in the crust, while others have a drop-biscuit or crumb topping.<sup>15</sup>

## Mixing Techniques Applied for Pies and Pastries

1. **Stirring** – uses a spoon; it is done in a circular motion to mix all the ingredients.<sup>16</sup>
2. **Beating** – uses an electric mixer to incorporate the air into the mixture.<sup>17</sup>
3. **Whisking** – uses an electric mixer or wire whisk to incorporate air into the mixture by beating rapidly. It is responsible in making the meringue stiff and light and is also known as the whipping method.<sup>18</sup>
4. **Rolling** – uses a rolling pin to flatten the dough.<sup>19</sup>
5. **Laminating** – used in the preparation of puff pastry and croissant wherein the fat is repeatedly folded into the dough.<sup>20</sup>
6. **Creaming** – means blending the fat and sugar together by mixing making the mixture larger in volume and soft in consistency.<sup>21</sup>
7. **Kneading** – is done by pushing the dough away from you with the heel of the palm.<sup>22</sup>

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13 Department of Education, *Bread*, 76.

14 Department of Education, *Bread*, 76.

15 Department of Education, *Bread*, 76.

16 Department of Education, *Bread*, 77.

17 Department of Education, *Bread*, 77.

18 Department of Education, *Bread*, 77.

19 Department of Education, *Bread*, 77.

20 Sercado, *Skills for a Lifetime*, 173.

21 Sercado, *Skills for a Lifetime*, 173.

22 Sercado, *Skills for a Lifetime*, 173.

8. **Cut in or cutting in** – uses a pastry blender or two knives to incorporate the butter into the flour.<sup>23</sup>

### Scaling Instructions for Baked Pies

PIE SIZE	WEIGHT OF FILLING	PIE SIZE	WEIGHT OF FILLING
8 in.	26 – 30 oz	20 cm	750 – 850 g
9 in.	32 – 40 oz	23 cm	900 – 1150 g

Table 4. Scaling Instructions for Baked Pies

Source: Department of Education, *Bread*, 103.

### Tools Used in Pastry Making

1. **Mixing bowls** – These should be light and easy to use with a rubber stay-put mat at the bottom.<sup>24</sup>
2. **Palette knife** – This is a useful tool to help with mixing pastry into dough and for leveling off the tops of mixtures.<sup>25</sup>
3. **Pastry cutters** – These are used for lining baking tins and for making individual pies.<sup>26</sup>
4. **Measuring scoops** – These are used for scooping out larger quantities of flour, sugar, etc.<sup>27</sup>
5. **Tartlet tin** – This is an invaluable item for making individual tarts. Loose bottomed, it is easy to remove the tart when cooked.<sup>28</sup>
6. **Rolling pin** – This is used for rolling out pastry, cookie dough, and biscuit. It can be made of plastic or wood.<sup>29</sup>
7. **Pastry brush** – This is used for glazing and brushing the tops of pastries.
8. **Food piping bag** – This is excellent for piping pastry like choux.<sup>30</sup>
9. **Spatula** – This is an essential utensil for spooning out mixing bowls, mixing and leveling off the tops of mixtures.<sup>31</sup>

### Product Characteristics for Pies and Pastries

- A. Outside Characteristics
  - a. Shape – even thinness all over; attractive, and neat even edges

23 Sercado, *Skills for a Lifetime*, 173.

24 Sercado, *Skills for a Lifetime*, 173.

25 Sercado, *Skills for a Lifetime*, 173.

26 Sercado, *Skills for a Lifetime*, 173.

27 Sercado, *Skills for a Lifetime*, 173.

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- b. Size – fits pan well
- c. Color – light golden brown with darker brown edges
- d. Crust – slightly blistered; rough; not smooth nor leathery appearance

**B. Inside Characteristics**

- a. Texture – delicate; crisp; flaky; not compact nor soggy
- b. Tenderness – easily cut but not crumbly or tough
- c. Flavor – rich; delicate; no scorched fat or salty taste; does not overpower taste of filling

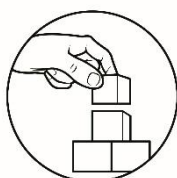
Source: Sercado, *Skills for a Lifetime*, 173.

## Baking Temperatures for Pies and Pastries

Types of Product	Oven Temperature	Baking Time
<b><i>Pastry</i></b>		
One – crust pie (custard type, unbaked shell)	400°F to 425°F	30 – 40 min
Meringue on cooked filling in prebaked shell	350°F to 425°F	12 – 15 min
Shell only	450°F	10 -12 min
Two – crust pies with uncooked filling	400°F to 425°F	45 – 55 min
Two – crust pies with cooked filling	425°F to 450°F	30 - 45 min

Table 5. Baking Temperatures for Pies and Pastries

Source: Department of Education, *Bread*, 103.



## What's More

*Aside from reading, it is of utmost importance to recall and enrich the learnings that you have right now through these activities. These were carefully made for you to ensure mastery of the essential skills that you need in preparing pastries. Please use a separate answer sheet for these activities.*

## Independent Activity 1. Selecting My Tools

*Let us start your journey to baking pastries with this activity.*

**Directions.** From the list of tools below, cross out those that are not needed in preparing pastry.

- |                                 |                |
|---------------------------------|----------------|
| Jelly roll pan                  | Blender        |
| Measuring cups (dry and liquid) | Mixing bowl    |
| Pallet knife                    | Kitchen shears |
| Rotary egg beater               | Thermometer    |
| Grater                          | Rolling pin    |

Pastry blender  
Pastry cutter  
Pastry tips  
Pastry bag  
Pie/pizza holder  
Weighing scale  
Spatula

Wooden spoon  
Measuring spoons  
Pastry brush  
Wire whisk  
Tartlet tin  
Flour sifter  
Hand mixer

What tools were left? Which tools are new to you? Which tools are always used in baking? Why is it important to use these tools repeatedly? Will it make any difference when you use the prescribed tools in preparing pastries?

## Independent Assessment 1. Time to explain!

*Now that you've selected the correct tools needed in preparing pastries, it is about time to explain their usage.*

**Directions.** Explain how the following tools will be used in preparing pastry products.

Palette knife

Tartlet tin

Pastry brush

Rolling pin

Pastry bag

Pastry cutter

## Independent Activity 2. Selecting My Ingredients

*Good to know that you already knew the tools used in preparing pastries as well as their usage. Now, that you have your tools, it's time to select your ingredients.*

**Directions.** Find and circle the basic ingredients that you need in preparing pastry in the puzzle below. Then, describe their roles or how they contribute to pastry products.

A	E	D	T	I	Y	U	I	O	S	M	N	G	S	W
B	K	H	J	M	I	L	K	Y	U	G	E	D	A	A
W	F	O	A	N	Q	D	T	E	G	Q	A	T	Q	Q
Q	D	L	I	O	S	H	Y	A	A	E	E	P	X	E
B	F	P	O	P	E	G	A	S	R	R	L	L	I	Y
N	G	J	E	U	T	O	E	T	O	T	P	M	O	I
M	J	S	A	Q	R	I	P	Y	U	Y	S	N	B	V
K	A	D	U	E	I	L	V	B	H	A	D	A	U	F
L	E	F	E	A	U	G	B	N	J	S	H	E	T	G
B	A	K	I	N	G	S	O	D	A	X	E	I	T	H
A	O	C	L	I	P	F	R	J	K	L	Y	V	E	A
O	U	V	N	O	S	D	F	A	T	P	K	B	R	E
E	T	A	B	A	K	I	N	G	P	O	W	D	E	R

## Independent Assessment 2. Identifying Me!

*It's not enough that you already have the tools and ingredients needed in preparing pastries. Of course, it must be clear to you the kinds of pastry that you can make which can help you create business opportunities.*

**Directions.** Identify what kind of pastry product is described in each number.

- \_\_\_\_\_ 1. A flat, disc-shaped bread usually topped with tomato sauce, cheese, bacon, pepper, pineapple and herb depending on taste preferences.
- \_\_\_\_\_ 2. It is basically the same as tarts but prepared in individual-portion sizes.
- \_\_\_\_\_ 3. It is also known as sugared dough.
- \_\_\_\_\_ 4. This pastry has many layers that cause it to expand when baked.
- \_\_\_\_\_ 5. It is a very light pastry that is filled with cream.

- \_\_\_\_\_ 6. Pastries that are usually paper thin and are greatly stretched.
- \_\_\_\_\_ 7. A pastry that begins as a soft dough and is made of strong flour, eggs, and water.
- \_\_\_\_\_ 8. It is bagged out into shapes which can be filled or iced with many kinds of creams, icings, and fruits to make an interesting variety of attractive desserts.
- \_\_\_\_\_ 9. These are American deep-dish fruit dessert or pie.
- \_\_\_\_\_ 10. It literally means broken dough.

### Independent Activity 3. Measure and compare!

*In your laboratory, you and your classmates may be using the same recipe most of the time but your output turns out to be different. One reason for this is the accuracy of the measurement of your ingredients. Let's take a while and see if there is really a difference when you use ordinary household wares rather than standard measuring tools.*

**Directions:** Complete the table below and compare the difference between the contents of ordinary household wares and standard measuring tools.

In this activity, you will need:

1. measuring cups (for dry and liquid)
2. weighing scale
3. sugar and water

#### Procedures:

1. Measure 1 cup of sugar using an ordinary cup found in your kitchen.
2. Transfer it to the standard measuring cup (dry) and see the difference.  
Does it contain more or less?
3. Weigh the flour. Write its measurement on the table below. Compare.
4. Measure 1 cup of water using an ordinary cup found in your kitchen.
5. Transfer it to the standard measuring cup (liquid) and see the difference.  
Does it contain more or less?

Ingredient s	Using Household Wares	Using Standard Measuring Tool	Difference	Conclusion
Sugar		1,000g		
Water		250ml		

### Independent Assessment 3. I know, right?!



*We're almost there! Let us now check if you already know the procedures in preparing crust with this activity. This is for a mealy pie crust.*

*Let's go!*

**Directions.** Number the following (1-6) to put the procedures in order.

- \_\_\_\_\_ Roll out dough with rolling pin.
- \_\_\_\_\_ Combine flour and margarine and cut in with pastry blender until the mixture becomes coarse.
- \_\_\_\_\_ Transfer pastry to pie plate leaving a 1 inch overhang.
- \_\_\_\_\_ Sprinkle with cold water one table spoon at a time until the dough holds its shape.
- \_\_\_\_\_ Prick bottom and sides with fork.
- \_\_\_\_\_ Fold overhang to make a stand up edge.

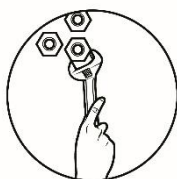


## ***What I Have Learned***

*Congratulations! You've just finished the enrichment activities as well as the assessments. I'm sure you're now ready to share your learnings by creating your video (if possible) and sharing it on your Facebook account or with your classmates through messenger. Your teacher would love to see your video so don't forget to send it to him or her, too.*

For this activity, you may use the following guide questions:

1. How would you describe pastries?
2. What are the kinds of pastries?
3. How do the tart and tartlets differ?
4. What possible pastry product can you make using the abundant product (e.g. coconut, banana, etc.) in your locality?



## ***What I Can Do***

*Here starts your baking journey for pies and pastries. For this activity, you are going to bake a pastry crust which can be filled with any fruit or product that is available at home or in your locality. It can be buko, egg, apple, etc. But remember that there are procedures in preparing fillings which you will master when you advance to the next module.*

*No oven? Don't worry because you may use your cast iron skillet over a stove to do this activity.*

**Directions.** Prepare a single pie crust using the recipe below. Make sure to demonstrate the proper method and correct proportion of ingredients. Make sure that you have a ready-made filling of your choice since there is a separate lesson in preparing fillings. Film this activity (if possible) and send it to your teacher for feedback.

### Single Pie Crust

#### *Ingredients:*

- 1 cup all-purpose flour
- 3 tbsp cold water
- 1/3 cup butter

#### *Procedure:*

1. Combine flour and margarine. Cut in with pastry blender, until the mixture becomes coarse. You may use fork, two knives or spatula if pastry blender is not available.
2. Sprinkle with cold water one tablespoon at a time until the dough holds its shape.
3. Roll out the dough with rolling pin between the sheets of wax paper (parchment paper). From center to edge until it fits the size of pie pan.
4. Transfer pastry to pie plate leaving a 1 inch overhang.
5. Fold overhang to make a stand up edge. Using fork or index finger, pinch pastry to make curve flute.
6. Prick the bottom and sides with fork.
7. Add the desired filling and bake.

Source: Idaosos, Merly, "Baking Manual" (Adventist University of the Philippines), 46.

*Assess your pie crust using the rubric below. You may also ask help from your guardian, parent or sibling in doing this.*

Standard Score Sheet for Pie and Pastry Making				
Outside Characteristics:		Good	Fair	Poor
Shape:	even thinness all over, neat even edges			
Size:	fits pan well			
Color:	light golden brown with darker brown edges			
Crust:	Slightly blistered, rough, not smooth or			

	leathery looking			
<i>Inside Characteristics:</i>				
Texture:	Delicately crisp, flaky, not compact or soggy			
Tenderness :	Easily cut but not crumbly or tough			
Flavor:	Rich, delicate, no scorched fat or salty taste, does not overpower taste of filling			
Total Score:				

Source: Sercado, *Skills for a Lifetime*, 182.

*For this activity, you will be graded based on the performance rubric below.*

<b>PERFORMANCE RUBRIC</b>			
<b>A. Learning Competencies</b>	<b>Highest Possible Score</b>	<b>Score</b>	<b>Remarks</b>
1. Select, measure and weigh required ingredients according to recipe or production requirements.	10		
2. Prepare a variety of bakery products according to standard mixing procedures/ formulation/ recipes and desired product characteristics.	10		
3. Use appropriate equipment according to required bakery products and standard operating procedures.	10		
4. Bake bakery products according to techniques and appropriate conditions.	20		
5. Select required oven temperature to bake goods in accordance with the desired characteristics, standards recipe specifications	10		
<b>B. Occupational Health and Safety Procedures</b>			
1. <i>Mis en place</i> . Ingredients, tools, and other materials are prepared and organized before baking.	10		
2. Practice personal hygiene and the wearing of the required personal protective equipment (PPE).	5		

3. Exhibits safe work techniques including handling of knives and equipment, handling hot surfaces, and other hazards and risks.	10		
4. Observes proper time management.	5		
5. Clay go. Work areas, sink, oven, or stove were kept clean and orderly.	10		
<b>Total points</b>	100		
<b>Comments / Suggestions:</b>			
<b>POINTS EARNED</b>		<b>DESCRIPTIVE RATING</b>	
95-100		Excellent	
90-94		Very good	
85-89		Good	
80-85		Fair	

Table 6. Performance Rubric. By Author

Source: Data from Department of Education. *K to 12 Home Economics—Bread and Pastry Production (NC II) Curriculum Guide*. (2016).



## Assessment

*Since you're done with the enrichment and hands on activities, I'm sure you're now ready to take the assessment again and see how you've improved.*

**Directions.** Choose the letter of the best answer. Write the chosen letter on a separate sheet of paper. Self-check your answer using the answer key on the back part of this module. Be sure to be honest to ensure that absolute learning takes place.

1. Why is pâte sablée called a 1-2-3 dough?
  - a. because it contains 1 part fat, 2 parts sugar, 3 parts flour
  - b. because it contains 1 part flour, 2 parts sugar, 3 parts fat
  - c. because it contains 1 part sugar, 2 parts fat, 3 parts flour
  - d. because it contains 1 part sugar, 2 parts flour, 3 parts fat
2. Which of the following kinds of pies describes itself correctly?
  - a. Cobbler is an American deep-dish fruit dessert or pie with a thin crust and fruit filling.
  - b. Mincemeat is a mixture of chopped dried fruit, distilled spirits and spices, and sometimes beef suet, beef, or venison.
  - c. Pizza is an oven-baked, flat, disc-shaped biscuit crust usually topped with tomato sauce and mozzarella cheese.
  - d. Shepherd's pie consists of a layer of ground meat and an overload vegetables topped with a creamy layer of mashed potatoes.
3. How do we apply the creaming method?
  - a. by beating fat and sugar together until light and airy texture
  - b. by folding fat repeatedly into the dough
  - c. by mixing all ingredients together usually in a circular motion
  - d. by whipping the ingredients to incorporate air into the mixture
4. Which of the following pastries is matched correctly?
  - a. pâte brisée = sugared dough
  - b. b. pâte sablée = crumbly dough
  - c. c. pâte sucrée = broken dough
  - d. d. pâte à choux = sandy dough
5. Which type of meringue is generally used to make crisp, baked shells?
  - a. Basic Meringue
  - b. French meringue
  - c. Italian meringue
  - d. Swiss meringue
6. How much filling will you use if your pan is 8 inches?
  - a. 26 - 30 oz
  - b. 32 - 40 oz
  - c. 41-50 oz
  - d. 51 - 60 oz
7. Why pâte brisée is also known as sablage?
  - a. because it is laminated and rolled in
  - b. because it contains even more fat and less egg and other moisturizers
  - c. because it contains higher amount of sugar which tenderizes the dough
  - d. because it contains fat and flour being combined until the mixture is similar to a coarse meal or sand.
8. Which oven temperature is best for a two-crust pie with cooked filling?
  - a. 350°F to 425°F
  - b. 400°F to 425°F
  - c. 425°F to 450°F
  - d. 350°F to 425°F
9. How long would you bake a shell?
  - a. 8-10 mins
  - b. 10-12 mins
  - c. 12-15 mins
  - d. 15-18 mins
10. Which of the following statements describes japonaise correctly?
  - a. It can be filled and iced with ice cream.
  - b. It is a special meringue containing nuts.
  - c. It can be filled with chocolate mouse and butter.

- d. It is a flavorful mixture usually made into rectangular shape.
11. How do puff and flaky pastries rise?
    - a. by adding baking powder into the mixture
    - b. by combining baking soda into the mixture
    - c. by mixing eggs as its leavening agent
    - d. by using steam as its raising agent
  12. Which of the following is NOT a contribution of fat to the pastry?
    - a. it adds flavor
    - b. it acts as a spacer
    - c. it lubricates and tenderized
    - d. it makes the dough rise
  13. Why is it important to place the measuring cup in a flat surface when measuring liquid ingredients?
    - a. to avoid the liquid to spill
    - b. to get the accurate measurement
    - c. to practice occupational health and safety
    - d. to be able to hold the liquid container properly
  14. How many ounces of all-purpose flour is equivalent to 4  $\frac{1}{2}$  cup of it?
    - a. 16  $\frac{1}{2}$  oz
    - b. 17oz
    - c. 18oz
    - d. 18  $\frac{1}{2}$ oz
  15. Ana ran out of granulated sugar. She needs a cup of it to complete her ingredients in baking pastries. Which of the following can be used as a substitute to it?
    - a. a cup of table sugar
    - b. a cup of powdered sugar
    - c. a cup of confectioner's sugar
    - d. a cup of tightly packed brown sugar



## ***Additional Activities***

*Isn't it exciting to bake? Would you be much excited to make pizza dough and top it with your available toppings at home? Let's continue the fun and learning by doing this another stimulating, mouth-watering activity.*

*No oven? Don't worry because you may use your cast iron skillet over a stove to do this activity.*

**A. Directions.** Prepare a pizza crust using the recipe below. Make sure to demonstrate the proper method and correct proportion of ingredients. Film this activity (if possible) and send it to your teacher for feedback.

### **Pizza Crust**

*Ingredients:*

- 1 cup lukewarm water
- 1 ½ T active dry yeast
- 2 tsp sugar
- 3 cups flour
- 2 T shortening

*Procedure:*

1. Grow yeast in 1/3 cup lukewarm water and sprinkle with sugar then set aside for 3 minutes.
2. Cut-in shortening into the flour. Make a well at the center, pour the liquid mixture.
3. Slightly knead the mixture to form soft dough.
4. Flatten the dough into desired shape.
5. Bake in a greased pizza pie pan at 425°F for 7 minutes.
6. Add available toppings at home and bake until cheese are melted.

Source: Idaosos, *Baking*, 47.

*Assess your pie crust using the rubric below. You may also ask help from your guardian, parent or sibling in doing this.*

<b>Standard Score Sheet for Pie and Pastry Making</b>				
<i>Outside Characteristics:</i>		Good	Fair	Poor
Shape:	even thinness all over, neat even edges			
Size:	fits pan well			
Color:	light golden brown with darker brown edges			
Crust:	Slightly blistered, rough, not smooth or leathery looking			
<i>Inside Characteristics:</i>				
Texture:	Delicately crisp, flaky, not compact or soggy			
Tenderness :	Easily cut but not crumbly or tough			
Flavor:	Rich, delicate, no scorched fat or salty taste, does not overpower taste of filling			

Total Score:	
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Source: Sercado, *Skills for a Lifetime*, 182.

For this activity, you will be graded based on the performance rubric below.

<b>PERFORMANCE RUBRICS:</b>			
<b>A. Learning Competencies</b>	<b>Highest Possible Score</b>	<b>Score</b>	<b>Remarks</b>
1. Select, measure and weigh required ingredients according to recipe or production requirements.	10		
2. Prepare a variety of bakery products according to standard mixing procedures/ formulation/ recipes and desired product characteristics.	10		
3. Use appropriate equipment according to			
4. required bakery products and standard operating procedures.	10		
5. Bake bakery products according to techniques and appropriate conditions.	20		
6. Select required oven temperature to bake goods in accordance with the desired characteristics, standards recipe specifications	10		
<b>B. Occupational Health and Safety Procedures</b>			
1. <i>Mis en place</i> . Ingredients, tools, and other materials are prepared and organized before baking.	10		
2. Practice personal hygiene and the wearing of the required personal protective equipment (PPE).	5		
3. Exhibits safe work techniques including handling of knives and equipment, handling hot surfaces, and other hazards and risks.	10		
4. Observes proper time management.	5		
5. Clay go. Work areas, sink, oven, or stove were kept clean and orderly.	10		
<b>Total points</b>	100		
<b>Comments / Suggestions:</b>			
<b>POINTS EARNED</b>		<b>DESCRIPTIVE RATING</b>	
95-100		Excellent	



90-94	Very good
85-89	Good
80-85	Fair

Table 6. Performance Rubric. By Author

Source: Data from Department of Education. *K to 12 Home Economics—Bread and Pastry Production (NC II) Curriculum Guide*

**C. Directions.** Make a portfolio of different recipes of pies and pastries. You may also add your pictures (if available) to your portfolio and narrate your journey in preparing pies and pastries.

**er Key**

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## Government Print

- Department of Education. *K to 12 Home Economics—Bread and Pastry Production (NC II) Curriculum Guide* (Department of Education, 2016)

