

TVL - Home Economics

# Bread and Pastry Production

First Quarter-Module 1

Measuring Ingredients Accurately



**Writer:** Nelia G. Jimenez

**Cover Illustrator:** Christopher E. Mercado



**City of Good Character**  
**DISCIPLINE • GOOD TASTE • EXCELLENCE**

GOVERNMENT PROPERTY  
**NOT FOR SALE**

Mayroong pag-aso dahil sa iyo, dahil sa inyong mga kabataan. Ang iyong mga ngiti, tawa, sigla, at likas na kabutihan ang inspirasyon naming mga magulang at guro upang pagbutihin ang pag-aalaga sa iyo, nang maipagpatuloy mo ang iyong pag-aaral at mga libangan.

Lagi ka sanang maging malusog, masayahan, masipag, at mapagmahal.

Ako ay sabik na maghihintay sa iyong pagbabalik sa paaralan sa hinaharap.

- Major Marcy





## Paano iniiwasan ng ating pamilya ang COVID-19?



Inaalagaan ba natin ang ating kalusugan sa pamamagitan ng **sapat na tulong, echersisyo, at masustansyang pagkain?**



Lagi ba tayong **naghuhugas ng kamay** gamit ang sabon at tubig o mga alcohol-based na produkto?



Pinapanatili ba natin ang kalinisan sa pamamagitan ng **palagiang pagdi-disinfect ng bahay?**



Binubuksan ba natin ang mga bintana para **makadaloy ang hangin** (natural ventilation)?



Iniawasan ba natin ang **paglabas ng bahay at pagpapapasok ng bisita** kung hindi naman kailangan? Kung may lalabas man, tayo ba ay nagsusuot ng **face mask at face shield?**



Nagbabasa o nakikinig ba tayo sa mga **balita at bagong impormasyon** tungkol sa COVID-19?



Tinatandaan ba natin ang mga **karaniwang sintomas** ng COVID-19? At alam ba natin kung saan tatawag kung sakaling mayroong may sintomas sa pamilya?



Tinuturuan ba tayo ng ating mga magulang at nagiging mabuti ba silang modelo ng mga nabanggit na health at safety protocols?

i love  
**Marikina**

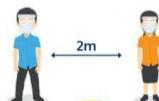
**Make Marikina COVID-19 Free**  
Stay safe, stay healthy!





## MGA PAALALA UPANG MAIWASAN ANG COVID-19



-  Laging magsuot ng face mask at face shield.
-  Practice Social Distancing  
(Dumistansya ng 2 metro kapag nakikipag-usap)
-  Laging maghugas ng kamay at gumamit ng alcohol.
-  Kumain ng masustansyang pagkain at uminom ng maraming tubig.
-  Uminom ng bitamina.
-  Panatilihing malinis ang kapaligiran.
-  Manatili lamang sa bahay kung walang mahalagang aasikasuhin at panatilihing ligtas ang tahanan sa COVID-19.
-  Agad sumangguni sa inyong doktor o pinakamalapit na health center kapag nakaramdam ng mga palatandaan ng COVID-19.

### Marikina COVID-19 Hotlines:



0926 626 3695  
0927 456 6682  
0961 470 3326  
0961 470 3327

**Make Marikina COVID-19 Free**  
Stay safe, stay healthy!



# HINDI PA TPOS ANG LABAN SA COVID-19: MGA PAALALA LABAN SA FAMILY CLUSTER iNFECTION

Iwasan ang hawaan sa pamilya, gawing ligtas ang tahanan. TANDAAN:



## MARIKINA COVID-19 CALL CENTER

### HOTLINE:

0926-626-3695  
0927-456-6682  
0961-470-3326  
0961-470-3327

## SWAB TEST



## GAWiNG LiGTAS ANG TAHA NAN.



- Huwag balewalain ang sintomas ng COVID-19
- Sundin ang quarantine protocols
- Huwag munang mag-dine in sa mga kainan/café
- Iwasan ang selebrasyon, inuman, at pagtambay
- Iwasan ang pulutong ng mga tao
- Huwag huhubarin ang face mask kapag nakikipagusap at panatilihin ang 2 meters na distansya
- Iwasan magpapasok ng mga bisita na hindi essential sa loob ng bahay
- Palaging maghugas ng kamay

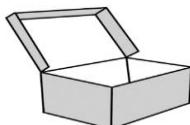
i love  
**marikina**



*Hindi kaya ng pamahalaan lamang.  
Magkakasama nating talunin ang COVID-19 sa Marikina.*

**PARA SA LiGTAS NA MARIKINA**





## What I Need to Know

This module was designed and written with you in mind. It is here to help you develop knowledge, skills, and attitudes in the performance of Bread and Pastry tasks. 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.

Quarter I – L.O.1 Prepare and Produce bakery Products

L.O.2 Decorate and present Bakery Products

L.O.3 Store bakery products

The module is divided into 8 lessons, namely:

Lesson 1 – Accurate measurements of ingredients

Lesson 2 – Baking ingredients, and its substitution

Lesson 3 – Types, kinds, and classification of bakery products

Lesson 4 – Mixing techniques and procedures in bakery products

Lesson 5 – Baking tools, utensils, and equipment

Lesson 6 – Baking techniques, principles, and guidelines in baking

Lesson 7 – Decorate and present bakery products

Lesson 8 – Selecting packaging materials and storing bakery products

**Learning Outcomes:** At the end of the lesson the students are expected to do the following:

L.O.1. Prepare bakery products:

1.1 Measuring ingredients accurately

### Culinary terms:

#### Baking Terminologies

As you wish to pursue baking as a career, you should familiarize yourself with the common preparation and baking terminologies that come across in the process.

**Accurate** is conforming the truth or to standard measuring.

**Bake Refers** to two culinary processes: cooking by dry heat in an oven and making up flour - based goods that are cooked by baking.

**Bread** is a staple baked food made from flour, liquid, and other ingredients.



**Bushel** is any of various units of measure of capacity. Imperial system is a system of weights and measures that includes pounds, ounces, feet, yards, miles, etc. We also call it imperial units, British imperial.

**Lump** is a firm irregular mass.

**Measurement** is an act or process of determining a specific amount of an ingredient using a standard measuring tool.

**Metric System** a system of measurement that uses the meter, liter, and gram as base units of length (distance), capacity (volume), and weight (mass) respectively

**Ounce** is a unit of weight equal to 1/16 of a pound (28.35 grams)

**Pound** a unit of measurement of mass equal to 1/16 ounce

**Shortening** a form of a solid fat like butter, margarine, and lard



## What I Know

Briefly explain the following terms below. (2 points each).

1. **Baking** –

---

---

2. **Bread** –

---

---

3. **Dough** –

---

---

4. **Measuring** –

---

---

5. **Volume** –

---

---



## Lesson 1

# Measuring Ingredients Accurately

Baking is an enjoyable hobby that everyone wants to do. Especially if you enjoy eating and letting other people taste your product.

Getting started to bake, it is important that you must know how to measure the ingredients accurately. To become successful in bread making, you need to be equipped with enough knowledge of accurate measurements of ingredients. Following the proper techniques and procedure, you can be able to prepare and bake a good quality product. Accurate measuring is the key to success in baking.



## What's In

In baking, one thing you should always bear in mind to prepare a baked product successfully is to know how to measure the ingredients. Knowing the proper techniques and guidelines for measuring liquid and dry ingredients. Also, make sure use the standard measuring tools such as standard measuring cup and spoons, and weighing scales.

### ***Notes to the Teacher***

In this lesson, the learners are expected to use appropriate measuring tools and utensils, follow the proper techniques during the laboratory but as a teacher always remind them to practice safety measures, sanitation at all times.



## What's New

Students will do the measurement test. They will scoop the flour from the bag using a measuring cup, and then level off. Then the second scoop will sift first the flour, then measure and level off. Then weigh both measured flour. Note the difference. Which cup has more volume? Then report it to the class.



### **How well did you perform?**

Your performance will be rated using the rubric below.

#### **Rubrics for Scoring:**

1	Able to discuss comprehensively the significant task.
2	Able to discuss the task appropriately with 1 or 2 errors.
3	Able to discuss appropriately the significant task with 3 to 5 errors.
4	Able to discuss appropriately the significant task with 6 to 8 errors.

Scale	Description	Points
4	Excellent	93 - 100
3	Good	86 - 92
2	Fair	79 - 85
1	Poor	78 - below



## **What is It**

### **Table of measurement and their equivalents**

The following are different tables of measurement and their equivalents using the three systems of measurements.

**Table 1.1 Abbreviations and System**

tsp.=teaspoon	l= liter
tbsp. or T = tablespoon	oz.= ounce
c.= cup	fl. oz.= fluid ounce
g. = gram	qt.= quart
kg. = kilogram	pt. = pint
ml.= milliliter	gal. gallon
	1lb. =pound

**Table 1.2 Liquid and Volume Measurements**

American	Metric	Imperial
1 teaspoon	5 ml.	1/6 fl. oz.
1 dessertspoon	10 ml.	1/3 fl. oz.
1 tablespoon	15 ml.	½ fl. oz.
¼ cup	60 ml.	2 fl. oz.



1/3 cup	180 ml.	2 ½ fl. oz.
3/8 cup	90 ml.	3 fl. oz.
½ cup	85 ml.	4 fl. oz.
¾ cup	125 ml.	6 fl. oz.
1 cup	250 ml	8 fl. oz.

Source: Marshall Cavendish Cuisine Asian Tidbits

**Table 1.3 Equivalents for one Unit and Fractions of a unit**

Tablespoon	Cup	Pint
1 tbsp. = 3 tsp.	1 c. = 16 tbsp.	1 pt. = 2 c.
¾ tbsp. = 2 ¼ tsp.	1/8 c. = 14 tbsp.	¾ pt. = 1 ½ c.
2/3 tbsp. = 2 tsp.	¾ c. = 12 tbsp.	2/3 pt. = 1 1/3 c.
½ tbsp. = 1 ½ tsp.	2/3 c. = 10 2/3 tbsp.	½ pt. = 1 c.
1/3 tbsp. = 1 tsp.	½ c. = 4 tbsp.	1/3 pt. 2/3 c.
	1/3 c. = 5 1/3 tbsp.	¼ pt. = ½ c.
	¼ c. = 4 tbsp.	1/8 pt. = ¼ c.
	1/8 c. = 2 tbsp.	

Quart	Gallon	Pound
1 qt. = 4 c.	1 gal. = 4 qt.	1 lb. = 16 oz.
¾ qt. = 3 c.	¾ gal. = 3 qt.	¼ lb. = 12 oz.
2/3 qt. = 2 2/3 c.	5/8 gal. = 5 pt.	²/₃ lb. = 10 2/3 oz.
½ qt. = 2 c. 1 pt.	½ gal. = 2 qt.	½ lb. = 8 oz.
¼ qt. = 1 c.	1/3 gal. = 5 1/3 c.	1/3 lb. = 5 1/3 oz.
1/8 qt. = ½ c.	¼ gal. = 1 qt.	¼ lb. = 4 oz.
	1/8 gal. = 1 pt.	1/8 lb. = 2 oz.

Source: Robles, Cynthia (ed.) Philippine Home Economics Baking Basics

**Table 1.4 Approximate Can Sizes and Contents**

Size of can	Volume	Weight
6 oz. can	¾ c.	185 grams
8 oz. can	1 c.	250 grams
12 oz. can	1 ½ c.	375 grams
16 oz. can	2 c.	500 grams
20 oz. can	2 ½ c.	625 grams
24 oz. can	3 c.	750 grams

Source: Dayrit, P. Favorite Filipino Recipes



To be effective bakers you have to develop the skills and knowledge in mensuration. Proper technique should always follow.

### **Measuring Liquid and Dry Ingredients Correctly**

#### **1. Dry Ingredients**

##### **A. Flour**

1. Sift the flour to remove lumps.
2. Scoop the sifted flour lightly into a measuring cup until overflow. Do not shake the cup.
3. Level off the cup with a straight-edged utensil or spatula.

##### **B. Sugar**

###### **White sugar**

1. Sifting is not needed unless it is lumpy.
2. Fill the measuring cup until it overflows. Do not shake the cup.
3. Level off with the spatula

###### **Brown Sugar**

1. Check if the sugar is lumpy before measuring. Roll out the lumps. Remove the dirt.
2. Pack into the measuring cup compactly until it follows the shape when inverted.
3. Level off with a spatula.

#### **C. Powdered Food (baking powder and baking soda )**

1. Remove the lumps in the powder by stirring.
2. Dip the measuring spoon into the powder.
3. Level with a spatula or back edge of the knife or right in the can open.

#### **D. Shortening**

##### **Solid fats**

1. Fill the measuring cup with the shortening while pressing until it is full.
2. Level the fat with a straight of a knife or a spatula.

##### **Liquid Fats**

1. Pour oil in the glass measuring cup.
2. Check if it filled up to the measuring mark. Do not lift the cup when measuring.
3. Read at eye level.

#### **E. Milk form**

1. **Liquid** it is to pour milk into the glass measuring cup. Check if the measurement is correctly measured. Do not lift the cup. Read at eye level.

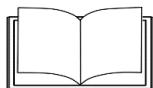


2. **Powdered milk** is to remove lumps in the milk by stirring. Scoop lightly into the measuring cup or spoon without shaking until it overflows. Level off with the spatula.

#### F. Solid Ingredients

Solid ingredients can be moist or dry. They are in large pieces.

- When measuring solid ingredients, “shake” the measuring cup from side to side to level the ingredients.



### What's More

Compute the following measurement given.

- 3 cups = \_\_\_\_ Tbsp.
- 2 kilo = \_\_\_\_ lbs.
- 4 pints = \_\_\_\_ cups
- 5 tablespoon = \_\_\_\_ teaspoon
- 1 gallon = \_\_\_\_ pints



### What I Have Learned

Answer what is asked in the question. Explain at least in two sentences. (5 points each)

- How will you measure the flour correctly? Explain your answer.

---

---

---

- What is the proper way of reading the liquid measuring cup? Discuss briefly.

---

---

---

- How will you measure the small amount of ingredients? Explain your answer.

---

---

---





## What I Can Do

Read and understand the direction below.

**Online Learners:** Demonstrate and create a video presentation on how to measure the ingredients used in baking.

**Offline Learners:** Do the actual measurement and make an observation report signed by the parent or guardian.

### Measuring the ingredients accurately

Select, measure and weigh required ingredients.

**Procedure:** Show to the class the proper measuring of the following ingredients:

1. Flour
2. Brown sugar
3. Baking soda
4. Evaporated milk
5. Nuts

### How well did you perform?

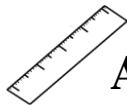
**For Online and Offline Learner:** Your performance will be rated using the rubric below.

#### Rubrics for Scoring:

4	Can perform this skill without supervision and with initiative and adaptability to problem situations.
3	Can perform this skill satisfactorily without assistance or supervision.
2	Can perform this skill satisfactorily but requires some assistance and or supervision.
1	Can perform this skill satisfactorily but requires considerable assistance and or supervision.

Scale	Description	Points
4	Excellent	93 - 100
3	Good	86 - 92
2	Fair	79 - 85
1	Poor	78 - below





## Assessment

I. Match column A with column B. Write the letter of the correct answer on the space provided before the number.

### A

- 1. 1 tablespoon
- 2. 1 gallon
- 3. 1 cup
- 4. 1 pound
- 5. 1 kilo

### B

- A. 16 tablespoon
- B. 1000 grams
- C. 3 teaspoon
- D. 16 cups
- E. 2 pints
- F. 16 ounce

II. Read carefully the question below and choose the best answer by writing only the letter on the space provided.

- 1. What is the proper way to measure flour accurately?
  - A. level off with the use of the tines of a fork
  - B. shakes the measuring cup before leveling
  - C. shovel the flour
  - D. sift it before measuring
- 2. How will you read liquid ingredients using the liquid measuring cup?
  - A. Bend down and read at eye level
  - C. Lift the glass and read
  - B. Read while pointing at the mark.
  - D. Read while shaking the glass
- 3. What types of ingredients are “packed “into the measuring cup?
  - A. Baking powder
  - B. Brown sugar
  - C. Flour
  - D. White sugar
- 4. To correctly measure solid ingredients, it should be \_\_\_\_\_ before leveling.
  - A. sift
  - B. shaken
  - C. shovel
  - D. scoop
- 5. To measure small amount ingredients like baking powder it should be \_\_\_\_\_ before leveling.
  - A. Sift
  - B. shaken
  - C. shovel
  - D. scoop



## Additional Activities

With the help of your parents or guardians, visit and interview a bakery near you.

### Guide Questions:

1. How do you measure your ingredients accurately?
2. What are the tools needed to measure the ingredients?



Write down your answer below.

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

### **How did you perform?**

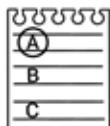
Your performance will be rated using the rubric below.

#### **Rubrics for Scoring:**

1	Able to discuss comprehensively the significant task.
2	Able to discuss the task appropriately with 1 or 2 errors.
3	Able to discuss appropriately the significant task with 3 to 5 errors.
4	Able to discuss appropriately the significant task with 6 to 8 errors.

Scale	Description	Points
4	Excellent	93 - 100
3	Good	86 - 92
2	Fair	79 - 85
1	Poor	78 - below





## Answer Key

Assessment Type:	What I know	Matching	Multiple Choice :
Answers:	1. 1 cup 2. 4 quarters 3. 3 teaspoons 4. 4.42 lbs. 5. 2 pints	A B C D E	1. D 2. A 3. B 4. B 5. D
What's More	1.48 tbsp. 1.42 cups 2. 4.42 lbs. 3. 8 cups 4. 1000 grams 5. 2 pints	F G H I J	
	1. 15 teaspoon 2. 8 pints	K L M N O	





## References

### Books

- Arcos, Cristeta; Domo, Anecita P.; Kong, AnecitaS.;Dogelio, Maila A . ,(2016) Bread and Pastry Production Manual,3 F. Maine City Tower, 236, Tomas Morato Avenue, Brgy. South Triangle, Quezon City, Philippines
- Basbas, Leonora D.( 2016) Bread and Pastry Production (Volume I ). P. Florentino St., Sta. Mesa Heights, Quezon City, Philippines
- Dayrit, Pat L.1985. Favorite Filipino Recipes. Quezon City, Le Cordon Bleu.
- Department of Education, Bread and Pastry Production, Learning Module, K-12 Basic Education Curriculum, Technology and Livelihood Education, Deped Complex, Meralco Avenue, Pasig City, Philippines 1600.
- Gisslen, Wayne (2013) Professional Baking ( Sixth Edition ) Hoboken, New Jersey, U.S.A., John Wiley & Sons, Inc.,
- Robles, Cynthia, N.( 1976) Philippine Economics Baking Basics ( First printing).Wheat Associates, U.S.A. P.O. Box 146, Makati Metro Manila
- Teoh, Debbie.2009.Asian Tidbit, Singapore: Marshall Cavendish Cuisine.



### **Development Team of the Module**

**Writer:** Nelia G. Jimenez (SHS TIII-MHS)

**Editors:**

Rosalina S. Cruz (MT I-PHS)

Sheilah G. Milla (Dept. Head-FHS)

Nerissa S. Estrella (ASP II/OIC-MNHS)

Mary Grace T. Frondozo (TIII-THS)

**Internal Reviewer:** Joseph T. Santos (Education Program Supervisor-EPP/TLE)

**Layout Artist:** Khrycys G. Olairez (TI, BNHS)

**Management Team:**

**Sheryll T. Gayola**

Assistant Schools Division Superintendent

OIC, Office of the Schools Division Superintendent

**Elisa O. Cerveza**

Chief, Curriculum Implementation Division

OIC, Office of the Assistant Schools Division Superintendent

**Joseph T. Santos**

Education Program Supervisor – EPP/TLE

**Ivy Coney A. Gamatero**

EPS – Learning Resource Management and Development System

**For inquiries or feedback, please write or call:**

**Schools Division Office-Marikina City**

Email Address: [sdo.marikina@deped.gov.ph](mailto:sdo.marikina@deped.gov.ph)

191 Shoe Ave., Sta. Elena, Marikina City, 1800, Philippines

Telefax: (02) 682-2472 / 682-3989



**City of Good Character**  
**DISCIPLINE • GOOD TASTE • EXCELLENCE**