

Unit 5: Kitchen Math

Content Area: **Family and Consumer Science**
Course(s): **Family & Consumer Sciences I**
Time Period: **3 weeks**
Length: **Weeks**
Status: **Published**

Unit Overview

Students will be able to understand why their success in the kitchen depends on proper and accurate measurements.

Transfer

Students will be able to independently use their learning to:

- Accurately measure ingredients for recipes.

Meaning

Understandings

Students will understand:

- How to identify measuring tools.
- The process of accurately measuring liquid and dry ingredients.
- How to identify measuring abbreviations and equivalents.
- The process of altering recipes based on the number of people being served.
- How to time cooking based on serving time and foods being prepared.

Essential Questions

Students will keep considering...

- Why success in the kitchen depends on properly and accurately measuring ingredients.

Application of Knowledge and Skill

Students will know...

Students will know:

- How to identify various measuring tools
- The procedure to accurately measure liquid and dry ingredients
- Measuring abbreviations and equivalents
- How to alter recipes based on the number of people being served.
- How to time cooking based on serving time and foods being prepared

Students will be skilled at...

Students will be skilled at:

- Identifying measuring tools
- Accurately measuring liquid and dry ingredients
- Identifying measuring abbreviations and equivalents
- Altering recipes based on the number of people being served.

- Timing their cooking based on serving time and foods being prepared

Academic Vocabulary

Learning Goal 1

Students will demonstrate knowledge of proper measuring techniques.

- Students will demonstrate knowledge of proper measuring techniques.

MA.8.4.2.8 D.1	Solve problems requiring calculations that involve different units of measurement within a measurement system (e.g., 4'3" plus 7'10" equals 12'1").
MA.8.4.2.8 D.2	Use approximate equivalents between standard and metric systems to estimate measurements (e.g., kilometers is about 3 miles).
MA.8.4.2.8 D.B	What we measure affects how we measure it.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
FCSE.9-12.2.1.1	Apply time management, organizational, and process skills to prioritize tasks and achieve goals.
FCSE.9-12.5.2.1	Apply environmental services standards and procedures in residential and commercial settings.
FCSE.9-12.5.2.2	Operate cleaning equipment and tools.
FCSE.9-12.5.2.3	Manage use of supplies.
FCSE.9-12.5.3	Demonstrate sanitation procedures for a clean and safe environment.
FCSE.9-12.5.4.3	Practice a recycling program for conservation of resources.
FCSE.9-12.5.5.3	Demonstrate safe procedures in the use, care, and storage of equipment.
FCSE.9-12.8.2	Demonstrate food safety and sanitation procedures.
FCSE.9-12.8.2.5	Practice standard personal hygiene and wellness procedures.
FCSE.9-12.8.2.6	Demonstrate proper purchasing, receiving, storage, and handling of both raw and prepared foods.
FCSE.9-12.8.2.7	Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods and food groups.
FCSE.9-12.8.3.1	Operate tools and equipment following safety procedures and OSHA requirements.
FCSE.9-12.8.3.2	Maintain tools and equipment following safety procedures and OSHA requirements.
FCSE.9-12.8.3.5	Demonstrate procedures for safe and secure storage of equipment and tools.
FCSE.9-12.8.3.6	Identify a variety of types of equipment for food processing, cooking, holding, storing, and

	serving.
FCSE.9-12.8.4.2	Apply menu-planning principles to develop and modify menus.
FCSE.9-12.8.4.7	Apply principles of measurement, portion control, conversions, food cost analysis and control, menu terminology, and menu pricing to menu planning.
FCSE.9-12.8.5.1	Demonstrate professional skills in safe handling of knives, tools, and equipment.
FCSE.9-12.8.5.2	Demonstrate professional skill for a variety of cooking methods including roasting, broiling, smoking, grilling, sautéing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies.
FCSE.9-12.8.5.3	Demonstrate knowledge of portion control and proper scaling and measurement techniques.
FCSE.9-12.8.5.4	Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding of a variety of foods.
FCSE.9-12.8.5.14	Demonstrate cooking methods that increase nutritional value, lower calorie and fat content, and utilize herbs and spices to enhance flavor.
FCSE.9-12.9.3.5	Analyze recipe/formula proportions and modifications for food production.
FCSE.9-12.9.6.4	Create standardized recipes.
FCSE.9-12.10.4.5	Manage use, care, storage, maintenance, and safe operations of equipment, tools, and supplies.
FCSE.9-12.10.4.7	Apply time and work management skills to facility service tasks.

Target 1

Identify measuring tools

- Identify measuring tools

Target 2

Accurately measure liquid and dry ingredients

- Accurately measure liquid and dry ingredients

Target 3

Identify measuring abbreviations and equivalents

- Identify measuring abbreviations and equivalents

Target 4

Alter recipes based on the number of people being served.

- Alter recipes based on the number of people being served.

Target 5

Time cooking based on serving time and foods being prepared

- Time cooking based on serving time and foods being prepared

Summative Assessment

Presentations

Portfolios

Production assignments

Projects

Unit Test

Formative Assessment and Performance Opportunities

Chapter review questions

Class Discussion

Class participation

Computer simulation activities

Exit Tickets

Homework

Internet activities

Section review questions

Self-Assessment

Teacher Directed Q&A

Teacher Observation of computer use

Workbook activities

Accommodations/Modifications

- provide additional labeling for kitchen tools
- color code measuring tools
- post charts of kitchen tools
- Pair struggling student with student experts for cooking activities

Unit Resources

Textbooks and Workbooks

Food for Today – textbook

Food for Today – student workbook

Food for Today – Re-teaching activities

Adventures in Food and Nutrition – textbook

Adventures in Food and Nutrition – student workbook

CD/DVD/VHS/TV

Exam view Pro CD-ROM

Food Network's Good Eats – Alton Brown

Food Network's Unwrapped – Marc Summers

Discovery Channel's The Colony: S2

Food Network's Ace of Cakes

Super-Size Me

Food Inc.

Ratatouille

Magazines/Periodicals/Newsletters

Food Network Magazine

HGTV Magazine

Taste of Home Magazine

A Goldy Bear Culinary Mystery Series by Diane Mott Davidson

Miserly Moms: Living on One Income in a Two Income Economy - Jonni McCoy

Deceptively Delicious – Jessica Seinfeld

Double Delicious – Jessica Seinfeld

Where's Mom Now That I Need Her: Surviving Away From Home - Betty Rae Frandsen,

Internet

www.google.com

www.bankrate.com

www.choosemyplate.gov

www.cdc.gov

www.myfitnesspal.com

www.prezi.com

www.powtoons.com

www.voki.com

<https://sites.google.com/a/monroetwp.k12.nj.us/mrs-lolli-facs/>

www.googleclassroom.com

www.Food.com

<http://topsecretrecipes.com>

<https://www.bettycrocker.com/>

www.kidswithfoodallergies.org

<https://allergicliving.com/recipes>

www.foodallergiesrecipebox.com

www.wholesomebabyfood.momtastic.com

<http://jessicaiefeld.com/recipes>