



Eating HEART HEALTHY

Seafood In Schools

Lesson: Basic Culinary Techniques



**SEAFOOD
NUTRITION
PARTNERSHIP**

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Learning Outcomes

Following this lesson, students will be able to:

- Understand basic culinary terms and measurements.
- Apply food safety best practices.
- Demonstrate basic culinary skills.





Part 1

Culinary Basics

- Culinary Terms
- Measurements
- Knife Safety
- Food Safety





Mise en Place

Mise en Place - means “everything in its place”. The French term refers to the process of gathering and arranging the ingredients and tools needed for cooking. Here are the steps to follow:

1. Selecting tools and equipment
2. Measuring ingredients
3. Preparing ingredients
4. Flavoring foods
5. Preparing to cook
6. Cook

Recipes use a wide variety of terms related to the cooking and measurement process. We will review some of the key kitchen terms you should know.





Recipe Anatomy

- The **title** of the recipe is located at the top of the recipe.
- The **yield or # of servings** tells you how many people the recipe will feed; it's usually located under the title.
- The **list of ingredients** tells you all the items you need to prepare the recipe; it's located under the yield or # of servings.
- The **amount of each ingredient** you need is located next to the list of ingredients.
- The **directions** are usually numbered and explain how to put the ingredients together.



Make sure you have all of the listed ingredients in the right amounts, and you have read through the entire recipe before you start to cook.





How To Follow A Recipe

- It is important to know some basic cooking terms and how to measure ingredients accurately when preparing foods.
- Most recipes list ingredients and directions in the order that they occur. Follow the recipe step-by-step.
 - Read the recipe carefully.
 - Get all utensils, tools and ingredients ready.
 - Follow instructions as directed.
 - Measure accurately.
 - Bake or cook to the required time and temperature.





Cooking Terms

There are many terms in the kitchen. We will review just a few:

Cooking Methods:

- Bake
- Boil
- Braise
- Broil
- Fry
- Grill
- Poach
- Sauté
- Sear
- Steam
- Stir-Fry
- Roast

Mixing:

- Beat
- Blend
- Combine
- Cream
- Cut in
- Fold
- Mix
- Stir
- Strain
- Whip

Cutting & Peeling:

- Chop
- Core
- Cube
- Dice
- Mince
- Pare
- Peel
- Slice





Measuring Ingredients

- There are slightly different methods used to measure dry, solid, and liquid ingredients.
- We will explore common units of measure and the steps to measure ingredients properly.



Basics at a Glance

Recipe Abbreviations

approx.	= approximate
tsp or t	= teaspoon
Tbsp or T	= tablespoon
c	= cup
pt	= pint
qt	= quart
gal	= gallon
wt	= weight
oz	= ounce
lb or #	= pound (e.g., 3#)
g	= gram
kg	= kilogram
vol	= volume
mL	= milliliter
L	= liter
fl oz	= fluid ounce
No. or #	= number (e.g., #3)
in. or "	= inches (e.g., 12")
°F	= degree Fahrenheit
°C	= degree Celsius or centigrade

Volume Equivalents for Liquids



60 drops	= 1 tsp	
1 Tbsp	= 3 tsp	= 0.5 fl oz
1/8 cup	= 2 Tbsp	= 1 fl oz
1/4 cup	= 4 Tbsp	= 2 fl oz
1/3 cup	= 5 Tbsp + 1 tsp	= 2.65 fl oz
3/8 cup	= 6 Tbsp	= 3 fl oz
1/2 cup	= 8 Tbsp	= 4 fl oz
5/8 cup	= 10 Tbsp	= 5 fl oz
2/3 cup	= 10 Tbsp + 2 tsp	= 5.3 fl oz
3/4 cup	= 12 Tbsp	= 6 fl oz
7/8 cup	= 14 Tbsp	= 7 fl oz
1 cup	= 16 Tbsp	= 8 fl oz
1/2 pint	= 1 cup	= 8 fl oz
1 pint	= 2 cups	= 16 fl oz
1 quart	= 2 pt	= 32 fl oz
1 gallon	= 4 qt	= 128 fl oz

Equivalent Weights



16 oz	= 1 lb	= 1.000 lb
12 oz	= 3/4 lb	= 0.750 lb
8 oz	= 1/2 lb	= 0.500 lb
4 oz	= 1/4 lb	= 0.250 lb
1 oz	= 1/16 lb	= 0.063 lb

Scoops (Dishers)



Size/No. ¹	Level Measure	Color Code ²
6	2/3 cup	
8	1/2 cup	
10	3/8 cup	
12	1/3 cup	
16	1/4 cup	
20	3-1/3 Tbsp	
24	2-2/3 Tbsp	
30	2 Tbsp	
40	1-2/3 Tbsp	
50	3-3/4 tsp	
60	3-1/4 tsp	
70	2-3/4 tsp	
100	2 tsp	

¹Scoops are left or right hand or squeeze type that can be used for both hands. Number on the scoop indicates how many level scoops make one quart. For example, eight No. 8 scoops = 1 quart.



²Use colored dots matching the brand-specific color coding of scoop sizes.

Ladles Portion Servers



Ladle fl oz	Approx. Measure	Portion Server fl oz
1 oz	1/8 cup	1 oz
2 oz	1/4 cup	2 oz
3 oz	3/8 cup	3 oz
4 oz	1/2 cup	4 oz
6 oz	3/4 cup	6 oz
8 oz	1 cup	8 oz
12 oz	1-1/2 cups	—

Ladles and portion servers (measuring-serving spoons that are volume-standardized) are labeled "oz." "Fl oz" would be more accurate since they measure volume, not weight.

Use ladles for serving soups, stews, creamed dishes, sauces, gravies, and other liquid products.

Use portion servers (solid or perforated) for portioning solids and semi-solids such as fruits and vegetables, and condiments.

Cooking or Serving Spoons



Solid Spoons

Perforated Spoons

Slotted Spoons

Spoons vary in length (11", 13", 15", 18", 21") for ease of use in cooking or serving. Spoons can have plastic handles that are heat-resistant. Level scoops, ladles, and portion servers provide more accurate portion control than serving spoons that are not volume-standardized measure.

Specialty Spoons



A thumb notch on a server or spoon handle prevents the spoon from slipping into the pan and prevents hands from sliding into the food. Triple-edge (solid or perforated) spoons have a flat edge that increases the area where the spoon touches the bottom of the pan when stirring.



Abbreviations

Are you familiar with the abbreviations below?

teaspoon

tsp.

Tablespoon

Tbsp.

cup

c.

pint

pt.

quart

qt.

ounce

oz.

pound

lb. or #

Fahrenheit

F



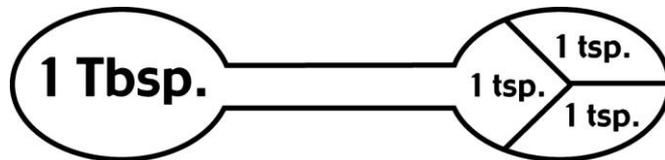


Equivalents

From small to large measurements:

- 1 Tbsp. = 3 tsp.
- 1 c. = 16 Tbsp.
- 2 c. = 1 pt.
- 4 c. = 1 qt.
- 16 c. = 1 gal.
- 2 pt. = 1 qt.
- 4 qt. = 1 gal.

1/4 c.		
	1 Tbsp.	1 Tbsp.
	1 Tbsp.	1 Tbsp.

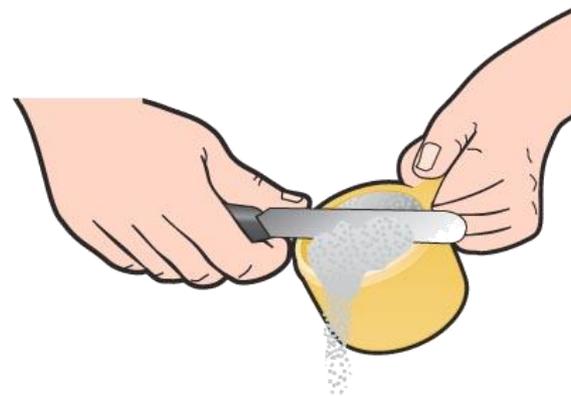




Measuring Dry Ingredients

For dry ingredients including flour, sugar, and salt, use dry measuring cups & spoons.

- Determine amount needed
- Fill cups (no packing)
- Level ingredients using a spatula
- Empty contents when needed



**dry measuring
cups**

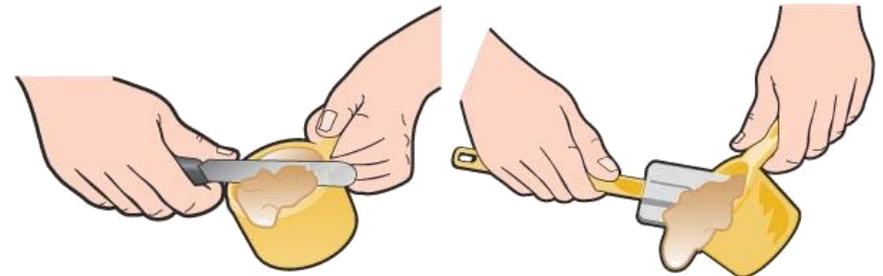




Measuring Solid Ingredients

For solid ingredients including peanut butter or shortening use dry measuring cups.

- Determine amount needed
- Pack ingredients into the cup
- Level ingredients using a spatula
- Scrape contents from the cup when needed



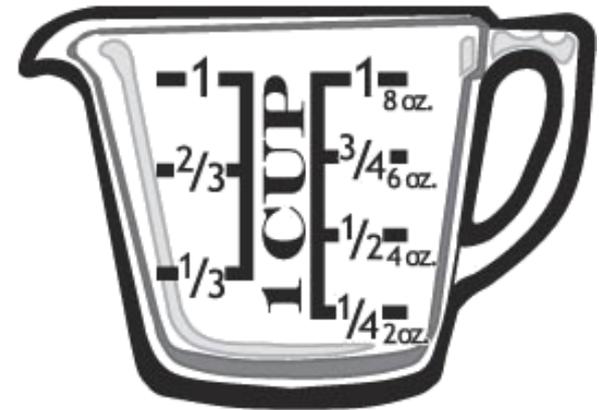
solid measuring cups



Measuring Liquids

For liquid ingredients including milk, water, oil, and juice, use liquid measuring cups.

- Determine amount needed
- Pour liquid ingredients into the measuring cup
- View at eye level to make sure the amount is correct
- Pour contents from the cup when needed



liquid measuring cup





Measuring Spoons

Use measuring spoons to measure small amounts of dry and liquid ingredients.

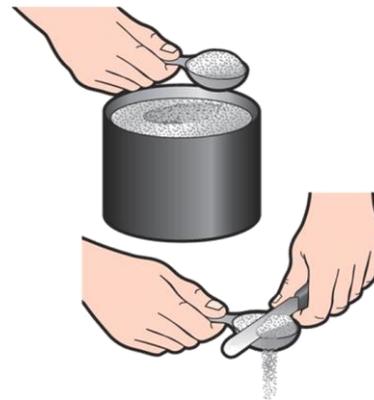
For liquid ingredients:

- Determine amount needed
- Pour liquid ingredients into the spoon
- Fill to the rim of the spoon



For dry or solid ingredients:

- Determine amount needed
- Fill spoon with a heaping pour
- Level ingredients with a spatula



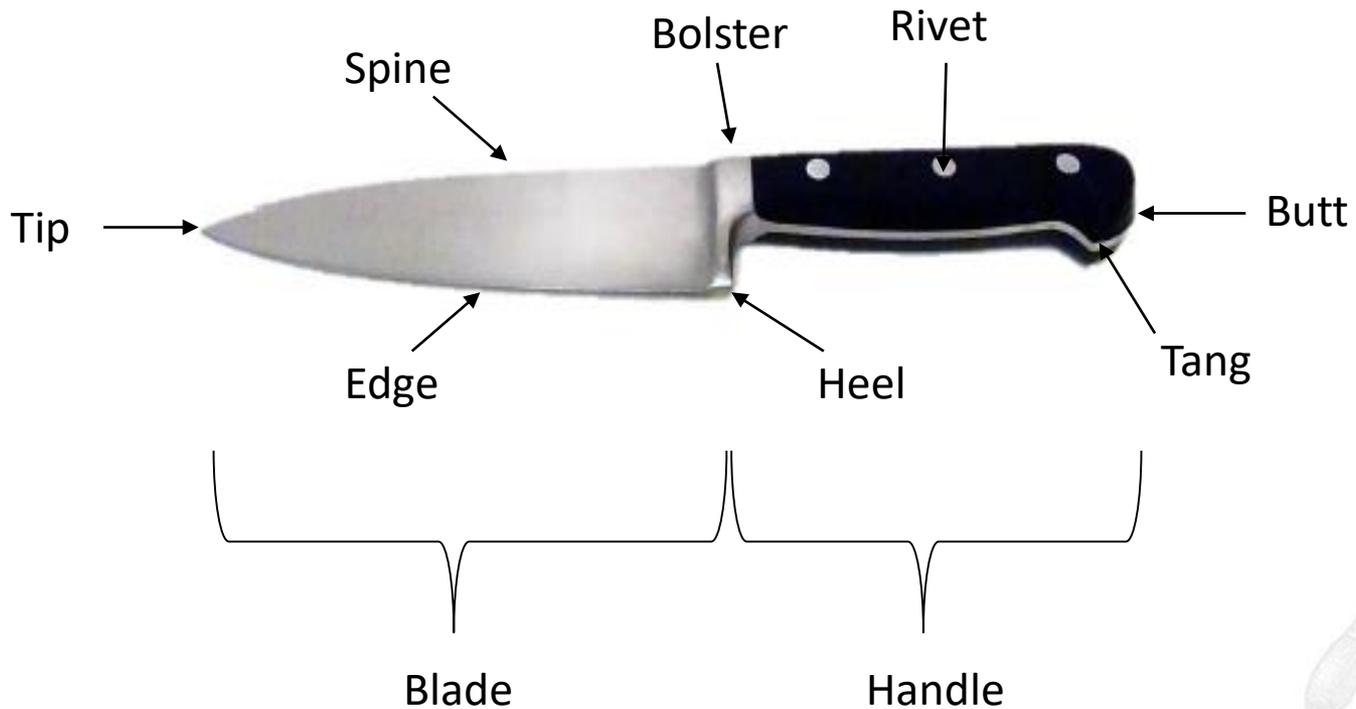


Types of Knives





Knife Anatomy





Basic Knife Safety

Securely hold your knife

Anchor cutting boards

Fingertips curled back

Eyes on the knife

Take your time

Yield to falling knives





Knife Safety: Proper Grip



The most common grip:

Hold the handle with three fingers while gripping the blade between the thumb and index finger.



Alternate grip:

Grip the handle with four fingers and place the thumb on the front of the handle.





Knife Safety: Improper Grip



You should **never** hold a knife only by the handle. This grip is very difficult to control and is more likely to result in accidents and/or injuries.





Kitchen Safety

- Many kitchen accidents are due to lack of information or carelessness.
 - Chemical poisoning, cuts, burns, fires and falls are the most common of these accidents.
 - Electric shock and choking are also common accidents.
- You can prevent many accidents by:
 - Properly using and caring for equipment.
 - Paying close attention for potential dangers.
 - Being organized and following directions.
 - Keeping your area clean.





Food Safety

Foodborne Illnesses:

- A foodborne illness is an illness transmitted by food.
- Millions of cases of foodborne illnesses occur in the U.S. each year. Many go unreported because people mistake their symptoms for the “flu”.

A food borne illness can result in one of two ways:

- **Contaminants** – substances (physical or chemical) that accidentally get into food.
- **Bacteria** – microorganisms that multiply and under certain conditions can cause people to get sick.





Food Safety (cont.)

Four basic steps to food safety:

1. **Clean**: Wash hands and surfaces often
2. **Separate**: Separate raw meat and poultry from ready-to-eat foods
3. **Cook**: Cook food to the right temperatures
4. **Chill**: Chill raw meat and poultry as well as cooked leftovers promptly (within 2 hours)





Proper Handwashing

What are things you should be doing before you cook for personal and kitchen cleanliness?



Wash hands with hot, soapy water.



Scrub hands, wrist and fingernails for at least 20 seconds.



Rinse with hot water.



Dry with a paper towel.

Keep yourself and your kitchen clean!





Part 2

Cooking Demonstration

- Cooking Videos
- Hands-on Cooking Practice





Let's watch some cooking videos!

Seafood Recipes (No Heat Required)

Kale Tuna Salad

Smoked Salmon Pinwheel





Kale Tuna Salad

From SNP Eating Heart Healthy Nutrition Program
Created By Chef Kelly Armetta, Hyatt Regency Boston



[Video Link](#)





Smoked Salmon Pinwheel

From SNP Eating Heart Healthy Nutrition Program
Created By Chef Kelly Armetta, Hyatt Regency Boston



[Video Link](#)





It's Your Turn to Cook!

Remember mise en place?

- Start by gathering everything in one place (recipe, ingredients, cooking and serving utensils, etc.)



Don't forget the food safety best practices you recently learned!

Once you have prepared both recipes, you will have the opportunity to score them based on look, smell, and taste!





Ingredients:

- 2 - 5oz. cans tuna
- 1 - Bunch kale or 1 bag of kale
- 2 oz. - Cherry tomatoes
- 1 - Lemon, raw
- 1/4 cup - Extra virgin olive oil
- 1/8 cup - Balsamic vinegar
- Kosher salt (to taste)
- Ground black pepper (to taste)

Directions

- Wash the kale. Set aside to drain water off.
- Cut tomatoes in half and lightly toss in bowl with balsamic vinegar, oil and pinch of salt and pepper. Set aside.
- In a salad bowl, mix tuna and juice from the can gently with squeeze of 1/2 lemon and a pinch of pepper.
- Massage kale for about 3 minutes to soften it.
- Add the kale and 1/2 the tomatoes to the tuna, and gently toss until all is coated with dressing.
- Add remaining tomatoes.
- Squeeze remaining lemon all over and serve.

Kale Tuna Salad





Items Needed

- All listed ingredients from the recipe
- Cleaning supplies
- Cutting board
- Gloves
- Knife
- Mixing bowl
- Mixing spoon
- Preparation table
- Serving plates and utensils
- Sink or bowl to drain seafood





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Smoked Salmon Pinwheel



Ingredients:

- 2 -2/3 oz. Smoked Salmon
- 1/3 cup Baby Spinach
- 3 oz. Goat Cheese Plain
- 1 tbsp. Minced Chives
- 1/3 tbsp. Minced Garlic
- 1 Flour tortilla
- Salt and Pepper to taste

Directions:

- Mix cheese, garlic and chives in a medium bowl; season with salt and pepper.
- Spread cheese mixture on the tortilla.
- Lay the spinach leaves flat in a single layer on half of the tortilla.
- Place thin slices of the smoked salmon on top of the spinach.
- Roll the pinwheel, starting with the salmon side.
- Cut and serve.





Items Needed

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Recipe Scorecard

Recipe Name	Look	Smell	Taste
Kale Tuna Salad			
Smoked Salmon Pinwheel			

Sample Descriptive Words

brown green soft
crunchy juicy spongy
delicious meaty strong
flaky mild sweet
fresh pink white
firm smooth yummy





You Did It!

You've completed the
Basic Culinary Techniques Lesson!





CERTIFICATE OF EXCELLENCE

is hereby granted to:

for outstanding participation in

SEAFOOD IN SCHOOLS

Presented on: _____

Date





Glossary





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Bake

To cook using dry heat, either covered or uncovered, in an oven or oven-type appliance.

Beat

To make a mixture smooth by adding air. Use a brisk over and over stirring motion with a spoon, or a rotary motion using a manual beater or electric mixer.

Blend

To combine two or more ingredients together thoroughly.

Boil

To heat a liquid to the point that bubbles break continuously on the surface.

Braise

To cook slowly in a covered pan using a small amount of liquid.

Broil

To cook by direct heat, under a broiler or over hot coals.

Chop

To cut food into small pieces with a knife.

Combine

To blend two or more ingredients into a single mixture.

Core

To remove the seeded, inner portion of a fruit.





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Cream

To make a fat, like butter or margarine, soft and smooth by beating it with a spoon or mixing with a mixer. Also, to combine a fat like butter with sugar until the mixture is light and fluffy.

Cube

To cut a solid food into squares of about 1/2" in size or larger.

Cut In

To mix a solid fat (eg butter, shortening or lard) evenly into dry ingredients by chopping with two knives or a pastry blender.

Dice

To cut into small squares of 1/8" to 1/4".

Fold

To combine two ingredients using a specific movement with a spoon. To fold: Go down through the mixture on the far side of the bowl with a spoon or spatula. Bring the spoon across the bottom of the bowl and up the near side. Turn the bowl slightly and repeat. Keep doing this until the mixture is well blended.

Fry

To cook in hot fat; to pan fry in a small amount of fat or deep fry in a large amount of fat that covers the food.

Grill

To cook on a rack over hot coals or other direct heat source that simulates coals.





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Mince

To cut or chop food into very small pieces.

Mix

To combine ingredients until all ingredients are evenly distributed.

Pare

To remove the outer peel or skin of a fruit or vegetable with a knife.

Peel

To pull away, strip or cut off the outer covering of a fruit or vegetable.

Poach

To cook slowly in a liquid such as water, seasoned water, broth or milk, at a temperature just below the boiling point.

Roast

To cook meat or vegetables in an uncovered pan in an oven using dry heat.

Sauté

To brown or cook meat, fish, vegetables or fruit in a small amount of fat.

Sear

To cook meat quickly at high heat to seal the surface of the meat and produce a brown color.





Slice

To cut a thin, broad piece of food from a larger portion.

Steam

To cook in a covered container over boiling water. The container should have small holes in it to allow the steam from the water to rise.

Stir

To mix ingredients in a circular motion with a spoon or fork until well blended.

Stir Fry

To cook in a frying pan or wok over high heat in a small amount of fat, stirring constantly.

Strain

To separate liquids from solids by passing them through a sieve.

Whip

To beat rapidly with a wire whisk, beater or electric mixer to incorporate air, lighten and increase volume.





We value your feedback!

Please take a moment
to complete the online survey.

Below is a survey link for students and a separate link for the instructor.

[Student Survey](#)

[Instructor Survey](#)

