# Cooking Merit Badge: Troop 451 Workbook

2017 requirements. Modified from the USScouts.Org workbook.

# **<u>1. Health and Safety</u>**. Do the following:

a. Explain to your counselor the most likely hazards you may encounter while participating in cooking activities and what you should do to anticipate, help prevent, mitigate, and respond to these hazards.

Hazard	How to anticipate, help prevent, mitigate, and respond		

b. Show that you know first aid for and how to prevent injuries or illnesses that could occur while preparing meals and eating, including burns and scalds, cuts, choking, and allergic reactions.

- □ Burns and Scalds
- Choking

Cuts

□ Allergic Reactions

c. Describe how meat, fish, chicken, eggs, dairy products, and fresh vegetables should be stored, transported, and properly prepared for cooking.

	Where/what temp for storage	How transported?	How Prepared; How Cooked and to What Temp?
	TOT STOTAge	transporteur	
Meat			
Fish			
Chicken			
Eggs			
Dairy			
Products			
Fresh			
Vegetables			

# d. Discuss with your counselor food allergies, food intolerance, and food-related illnesses and diseases. Explain why someone who handles or prepares food needs to be aware of these concerns.

Food allergies	
Food Intolerances	
Food-related Illnesses	
Food-related Diseases	

e. Discuss with your counselor why reading food labels is important.

Explain how to identify common allergens such as peanuts, tree nuts, milk, eggs, wheat, soy, and shellfish.

Potential

Allergen	Alternate names and foods which generally contain these allergens
Peanuts	
Tree nuts	
Milk	
Eggs	
Wheat	
Soy	
Shellfish	

#### **<u>2. Nutrition.</u>** Do the following:

a. Using the MyPlate food guide or the current USDA nutrition model, give five examples for EACH of the following food groups, the recommended number of daily servings, and the recommended serving size:

1.	Fruits. Recommended # of daily servings:      Five Examples and Serving sizes:
2.	Vegetables. Recommended # of daily servings:
	Five Examples and Serving sizes:
2	
3.	Grains. Recommended # of daily servings: Five Examples and Serving sizes:
4.	Proteins. Recommended # of daily servings:
	Five Examples and Serving sizes:
5.	Dairy. Recommended # of daily servings:
	Five Examples and Serving sizes:
b.	Explain why you should limit your intake of oils and sugars.

c. Determine your daily level of activity and your caloric need based on your activity level.

AGE	Cal for Sedentary Male	Daily Cal for Moderately Active Male
11	1800	2000
12	1800	2200
13	2000	2200
14	2000	2400
15	2200	2600
16	2400	2800
17	2400	2800

(table from health.gov/dietaryguidlines/2015

Or use: https://www.active.com/fitness/calculators/calories or a similar website.

Age: \_\_\_\_\_ Daily activity \_\_\_\_\_ # Calories Needed \_\_\_\_\_

Then, based on the MyPlate food guide, discuss with your counselor an appropriate meal plan for yourself for one day.

d. Discuss your current eating habits with your counselor and what you can do to eat healthier, based on the MyPlate food guide.

e. Discuss the following food label terms:

- Calorie
- 🗆 Fat
- □ Trans Fat
- Cholesterol
- □ Carbohydrate □ Dietary Fiber
- □ Protein
- □ Saturated Fat
- 🗆 Sodium
- Sugar

Explain how to calculate total carbohydrates and nutritional values for two servings, based on the serving size specified on the label.

#### 3. Cooking Basics. Do the following:

a. Discuss EACH of the following cooking methods. For each one, describe the equipment needed, how temperature control is maintained, and name at least one food that can be cooked using that method: baking, boiling, broiling, pan frying, simmering, steaming, microwaving, grilling, foil cooking, and use of a Dutch Oven.

Method	Equip. Needed	Food Example	How is temp. control maintained?
Baking			
Boiling			
Broiling			
0			
Pan Frying			
i dii i ying			
c: ·			
Simmering			
Steaming			
Microwaving			
Grilling			
Foil Cooking			
_			
Dutch Oven			

□ b. Discuss the benefits of using a camp stove on an outing vs. a charcoal or wood fire.

 $\Box$  c. Describe for your counselor how to manage your time when preparing a meal so components for each course are ready to serve at the correct time.

Note: The meals prepared for Cooking merit badge requirements 4,5, and 6 will count only toward fulfilling those requirements and will not count toward rank advancement. Meals prepared for rank advancement may not count toward the Cooking merit badge. You must not repeat any menus for meals actually prepared or cooked in requirements 4,5, and 6.

**4. Cooking at home.** Using the MyPlate food guide or the current USDA nutrition model, plan menus for three full days of meals (3 breakfasts, 3 lunches, and 3 dinners) plus one dessert. Your menus should include enough to feed yourself and at least one adult, keeping in mind any special needs (such as food allergies) and how you kept your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals.

a. Create a shopping list for your meals showing the amount of food needed to prepare and serve each meal, and the cost for each meal.

How many people are you planning to feed? \_\_\_\_\_

Day 1 Breakfast:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 1 Lunch:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 1 Dinner:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 2 Breakfast:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 2 Lunch:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 2 Dinner:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 3 Breakfast:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 3 Lunch:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Day 3 Dinner:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

□ b. Share and discuss your meal plan and shopping list with your counselor.

□ c. Using at least five of the 10 cooking methods from requirement 3, prepare and serve yourself and at least one adult (parent, family member, guardian, or other responsible adult) one breakfast, one lunch, one dinner, and one dessert from the meals you planned. (Record this on the next page.)
 Cooking methods used: □ Baking □ Boiling □ Broiling □ Pan Frying □Simmering

□Steaming □ Microwaving □ Grilling □ Foil Cooking □ Dutch Oven

d. Time your cooking to have each meal ready to serve at the proper time. Have an adult verify the preparation of the meal to your counselor.

e. After each meal, ask a person you served to evaluate the meal on presentation and taste, then evaluate your own meal.

🗆 Breakfast #	ŧ	Date:	Signature:	
Evaluation by tho	se served		Self Evaluat	tion
Presentation	Taste		Presentation	Taste

🗆 Lunch #	Date:	Signature:		
Evaluation by tho	se served	Self Eva	aluation	
Presentation	Taste	Presentation	Taste	

🗆 Dinner #	C	Date:	Signature:	
Evaluation by tho	se served		Self Evaluat	tion
Presentation	Taste		Presentation	Taste

Dessert	D	)ate:	Signature:	
Evaluation by tho	se served		Self Evaluat	tion
Presentation	Taste		Presentation	Taste

Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how planning and preparation help ensure a successful meal.

### 5. Camp Cooking. Do the following:

a. Using the MyPlate food guide or the current USDA nutrition model, plan five meals for your patrol (or a similar size group of up to eight youth, including you) for a camping trip. Your menus should include enough food for each person, keeping in mind any special needs (such as food allergies) and how you keep your foods safe and free from cross-contamination. These five meals must include at least one breakfast, one lunch, one dinner, AND at least one snack OR one dessert. List the equipment and utensils needed to prepare and serve these meals.

b. Create a shopping list for your meals showing the amount of food needed to prepare and serve each meal, and the cost for each meal.

How many people are you planning to feed? \_\_\_\_\_

Meal 1 Breakfast:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Meal 2 Lunch:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Meal 3 Dinner:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Meal 4	_: Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Meal 5	_:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits				
Vegetables				
Grains				
Proteins				
Dairy				
Fats/Oils				

Food	to purchase	Amt. Needed	Cost

Dessert or Snack	Menu Item	Amt. Needed	Equipment/utensils needed	
F	Food to purchase	Amt. Need	led Cost	
_				

c. Share and discuss your meal plan and shopping list with your counselor.

d. In the outdoors, using your menu plans for this requirement, cook two of the five meals you planned using either a lightweight stove or a low-impact fire. Use a different cooking method from requirement 3 for each meal. You must also cook a third meal using either a Dutch over OR a foil pack OR kabobs. Serve all of these meals to your patrol or a group of youth. e. In the outdoors, prepare a dessert OR a snack and serve it to your patrol or a group of youth.

f. After each meal, have those you served evaluate the meal on presentation and taste, and then evaluate your own meal.

🗆 Meal #	Date:	Cooking Method:	
Evaluation by those served		Self E	valuation
Presentation	Taste	Presentation	Taste

🗆 Meal #	Date:	Cooking Method:	
Evaluation by the	ose served	Self Eval	uation
Presentation	Taste	Presentation	Taste

🗆 Meal #	Date:	Cooking Method:		_
Evaluation by the	se served	Self Ev	aluation	
Presentation	Taste	Presentation	Taste	

Dessert or	snack	Date:		
Evaluation by those served			Self Evalua	ation
Presentation	Taste		Presentation	Taste

Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how planning and preparation help ensure successful outdoor cooking.

g. Explain to your counselor how you cleaned the equipment, utensils, and the cooking site thoroughly after each meal. Explain how you properly disposed of dishwater and of all garbage.

h. Discuss how you followed the Outdoor Code and no-trace principles when preparing your meals.

#### 6. Trail and backpacking meals. Do the following:

a. Using the MyPlate food guide or the current USDA nutrition model, plan a menu for trail hiking or backpacking that includes one breakfast, one lunch, one dinner, and one snack. These meals must not require refrigeration and are to be consumed by three to five people (including you). Be sure to keep in mind any special needs (such as food allergies) and how you will keep your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals.
b. Create a shopping list for your meals, showing the amount of food needed to prepare and serve each meal, and the cost for each meal.

Breakfast:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Lunch:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Dinner:	Menu Item	Amt. Needed	Equipment/utensils needed
Fruits			
Vegetables			
Grains			
Proteins			
Dairy			
Fats/Oils			

Food to purchase	Amt. Needed	Cost

Snack:	Menu Item	Amt. Needed	Equipment/utensils needed
	Food to purchase	Amt. Need	ded Cost

c. Share and discuss your meal plan and shopping list with your counselor. Your plan must include how to repackage foods for your hike or backpacking trip to eliminate as much bulk, weight, and garbage as possible.

□ Discuss meal plan and shopping list.

□ Discuss how you plan to repackage foods.

d. While on a trail hike or backpacking trip, prepare and serve two meals and a snack from the menu planned for this requirement. At least one of those meals must be cooked over a fire, or an approved trail stove (with proper supervision).

e. After each meal, have those you served evaluate the meal on presentation and taste, then evaluate your own meal.

🗆 Meal #	Date:	Heat Source:		
Evaluation by the	ose served	Self E	valuation	
Presentation	Taste	Presentation	Taste	

Meal # _	Date:	Heat Source:		
Evaluation by	those served	Self Ev	valuation	
Presentation	Taste	Presentation	Taste	

Snack	Date:		
Evaluation by the	ose served	Self Ev	valuation
Presentation	Taste	Presentation	Taste

Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how planning and preparation help ensure successful trail hiking or backpacking meals.

f. Discuss how you followed the Outdoor Code and no-trace principles during your outing. Explain to your counselor how you cleaned any equipment, utensils, and the cooking site after each meal. Explain how you properly disposed of any dishwater and packed out all garbage.

## 7. Food-related careers.

Find out about three career opportunities in cooking.

1.	
2.	
3.	

Select one and find out the education, training, and experience required for this profession.

Career: \_\_\_\_\_

Education	
Training	
Training	
Experience	
Lypenence	

Discuss this with your counselor, and explain why this profession might interest you.