

All Grades!



The Ultimate Guide: Cooking with Kids in the Classroom





Why Should You Cook with Students ?

You might be thinking, “How can I fit in one more extra activity into my busy schedule? I already have SO much content to teach.” Have no fear – cooking is an activity that can reinforce content that you are teaching in your existing curriculum. Plus, it can have a lasting effect on the health of your students (and their families!)

Math:

Through the process of cooking, students will get a deeper understanding of quantities (by taking measurements with a variety of tools and adding ingredients together). They will be required to use reasoning to determine the correct approach, materials or strategy to use while preparing a recipe. In some cases, they will be required to do mathematical calculations to convert one unit of measurement to another, or determine a new quantity of ingredients if they need to multiply or divide the recipe to produce a different number of servings.

Language Arts:

Students will improve their vocabulary through activities that require them to describe a sequence of events; follow, give or paraphrase instructions; and relate prior knowledge to their experience.

Science:

Cooking is chemistry in action. Students will observe physical changes in the foods that they prepare, and will have the opportunity to record their experiences. Older students can study the chemical properties of foods and can learn the difference between proteins, fats and carbohydrates, and how they are used by the human body. They will also have the opportunity to measure ingredients using a variety of tools and units. Of course, they can also recognize where their food comes from, how it is grown, it’s role in the ecosystem, and its impact on the environment. And don’t forget about all of the health and nutrition concepts that can be addressed with cooking activities!

Social Studies:

Cooking is an excellent opportunity for students to practice following the rules and being an overall good citizen. They can examine the cultural origin of their recipes (and look at maps!) and compare those cultures to their own. Through further study, students can learn about the economic impact of how food is grown, along with the process of food production and distribution.

Occupational Therapy and Social Skills:

Cooking in groups allows students to practice their social skills by taking turns. It also gives them practice with fine motor skills. Preparing foods and tasting them provides children with exposure to new textures, flavors and smells. Did you know that it can take a person 8-10 exposures to a new food before they may like it?

Setting Up for Success



It's important that your students feel excited and safe about their cooking experience with you. Many of them have had very limited experience with food and are not used to trying new ingredients, let alone new types of cuisines.

Some Tried and True Strategies...

- While you will be eager for them to expand their culinary horizons, please *don't force* the students to taste their food.
- Encourage them to try appropriate ingredients and their finished product, but don't pressure them if they are not ready. They will taste new foods when they are (some will try things immediately, but others will take awhile – don't worry – it will happen eventually!)
- Whenever possible, I'd encourage you to bring *whole* ingredients, and have the students do as much preparation as possible.
- If you are short on time, you may choose to pre-cook some of the ingredients in advance, such as rice, pasta or baked potatoes for use in other recipes.

Who Can Benefit from these Suggestions?

I have used these strategies with students of all ages. Kindergarteners through second graders need some additional support and extra supervision, of course, since they are still working on their gross motor skills. But students, even this young, are very capable chefs.

These guidelines are written with the assumption that you will be teaching students to cook in a classroom environment, rather than in a "real" kitchen. You can use them in a kitchen too, of course, with the added benefit that you won't have to carry a portable heat source with you.

All students can benefit from the integration of cooking into their learning environment. Teaching isn't reserved just for the traditional classroom, of course. These strategies can also be implemented in after school programs, summer camps, scout meetings, daycare centers and homeschool settings.

PREPARE

Getting Organized

RECIPE

- In advance, take out all of the tools and ingredients that your recipe requires.
- Print multiple copies of the recipe or the portion of the recipe that each group of students needs to use. Insert each page into a plastic sheet protector, so that it is immune to inevitable spills
- You can set up your work space in a variety of ways:
 - Display all relevant tools and ingredients in a visible and accessible classroom location, and students can borrow what they need and then return it. This strategy works better with older students.
 - Alternatively, you can set up stations with specific ingredients, tools and instructions for one portion of any given recipe.
- Bring extra towels with you to dry your dishes or to clean up spills.
- Be sure that you have dish soap; encourage each student to wash his or her own tools and utensils as they work, so that the class can be dismissed on time.

COOK

INGREDIENTS

Reduce Waste



Bring a tub, container or bag for food scraps and compost. You can bring these home with you to compost (or feed to your worms or chickens), or discard at your facility if they have an appropriate way for you to dispose of the waste.

Encourage students to bring a plate, cup and utensils from home that they can use for each class. Or, if you have adequate dishwashing facilities, keep a class set of reusable dishes in your kitchen or classroom to use.

Ask students to bring a container with a lid to class, in case there are any leftovers they'd like to take home.

Suggested Tools for Cooking with Children in a Kitchen

- 4 pot holders (mitt style)
- Stack of kitchen towels
- Dish soap
- Scrubbies, sponges
- 1 first aid kit
- 1 soup pot
- 2 skillets – two sizes
- 1 wok
- 1 steamer basket
- 1 salad spinner
- 20 cutting mats
- 4 baking sheets or jelly roll pans
- 1 oven safe baking dish
- 4 large stainless steel bowls
- 1 chef's knife
- 1 paring knife
- 4 spatulas
- 2 bamboo spoons
- 2 tongs
- 1 ladle
- 4 sets of measuring spoons
- 4 sets of measuring cups
- 4 vegetable peelers
- 1 can opener
- 2 juicers or reamers
- 1 small colander
- 1 large colander
- 4 rolling pins
- 4 whisks
- 4 cheese graters
- 1 garlic press
- 10 child safe knives (we prefer the Curious Chef brand, but plastic lettuce knives work)

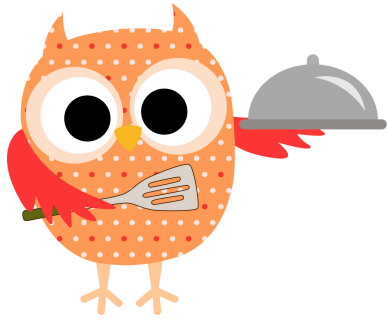


Suggested Tools for Cooking in the Classroom



If you are cooking with children in a classroom, you may need these pieces of equipment, in addition to the items on the previous page.

- Storage bins (of varying sizes) to hold your tools and keep them organized
- Folding hand cart or dolly to transport your equipment (especially if you are bringing items back and forth from home)
- 1 electric skillet and / or 1 induction burner with suitable cooking vessel
- 1 rice cooker
- 1 blender
- 1 -2 extension cord(s)



Age Appropriate Cooking Tasks

2-3 year olds can:	4-6 year olds can:	7-12 year olds can:
<ul style="list-style-type: none"> • Rinse vegetables or fruits • Tear lettuce or herbs into smaller pieces • Stir • Pour with assistance • Drain canned beans (and similar ingredients) into a strainer in the sink • Select which ingredients they want to taste or use • Brush items, such as bread or veggies with olive oil before cooking • Recognize changes to ingredients during the cooking process • Sort ingredients • Help identify ingredients in the grocery store • Group utensils when setting the table. 	<ul style="list-style-type: none"> • Pour • Mix • Peel the paper skin from garlic and onions • Count and do simple measurements • Cut with a plastic or butter knife • Squeeze lemons/limes • Crack eggs • Use a salad spinner • Knead dough • Start to follow recipe cards and symbols • Create their own recipes, and draw them on cards • Identify images or diagrams of ingredients on your grocery list • Set the table. • Do tasks listed previously 	<ul style="list-style-type: none"> • Write your shopping list and read it to you at the store. • Help select which recipes the family will share at mealtime. • Read and follow recipes • Work with a heat source (supervised) • Make scrambled eggs • Cut with a sharper knife (with instruction) • Create their own recipes and write the steps • Help to wash dishes • Do tasks listed previously

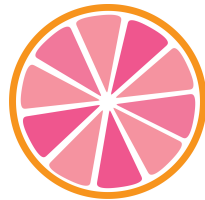
Safety Suggestions



- Be aware of any food allergies that your students might have. Please do not make assumptions – be sure to ask parents or guardians to be *sure*
- Tie long hair back into a ponytail or wear a cap.
- Wash hands with warm soapy water before handling tools or ingredients. Be sure students scrub all surfaces of their hands, and have them “scratch” their soapy hands with their fingernails to be certain that the fingernails get clean.
- Prop restroom door open so that children do not touch the dirty door knob each time they leave after washing their hands.
- If students have to sneeze or cough, have them turn away from the cooking area and do it into their elbow.
- If you see students touching their face with their hands, gently encourage them to wash their hands. Try not to call them out in front of their peers, especially if you see fingers in noses.
- Use a nontoxic cleaner to clean all of your cooking surfaces before you begin your activity.
- Teach children safe strategies for walking with knives (carry the knife by the handle, with the tip pointed toward the ground; insist they NEVER try to catch a falling knife...) and moving any culinary tools around the kitchen
- Use “safe” knives with the children while teaching them proper cutting techniques, and allow them ample time to practice before they are allowed to graduate to using sharper tools.
- Be sure students know how to give wobbly food items (like carrots or potatoes) a flat edge so that they don’t roll around on the cutting board.
- Teach students how to use pot holders, and be sure that they are dry before students use them to handle hot objects.
- Keep pot and pan handles facing the back of the stove, so that students can’t accidentally knock into them and cause spills or burns.
- Mark a safety zone, using blue painter’s tape on the floor, surrounding the stove or around the electric skillet (or any other heat sources). Only designated students are allowed inside this area at any one time.
- No running inside.

Taste: To Do & Notice

Many students don't realize that many fruits and vegetables come in more than one color!



Conduct a Taste Test:

- Have students work in pairs or small groups.
- Ask students to wash their hands with soap.
- Provide each group of students a cutting board, a knife, a few toothpicks and several varieties of produce.
- Have the students cut their produce into pieces.
- As they taste their food, remind them to use their senses.
- Notice the color, fragrance, texture and flavor.
- Students should record their observations, and you can even collect class data and make a variety of graphs on the board.
- Try these types of produce for this activity: different types of citrus; or varied colors of bell peppers, carrots, or tomatoes

Alternatives:

- Taste one type of produce cooked in a variety of ways: raw, steamed, sautéed
- Compare and contrast foods that are the same color (Green foods: lettuce, avocado, peas, broccoli etc.)



Produce Tasting Chart



Directions: For each variety of produce you taste, describe it with words or symbols (+ / - or 😊 / 😞) in the appropriate column	Variety 1 (Name it or Draw it in this box)	Variety 2 (Name it or Draw it in this box)	Variety 3 (Name it or Draw it in this box)
Flavor (sweet, bitter, sour or ?)			
Texture (crunchy, soft, smooth, bumpy, ?)			
Smell (How did it smell to you? Did you like the fragrance?)			
Did You Like It?			



Optional Teaching Extensions

Cooking can be a stand-alone activity, but it can also be a source of inspiration for a larger interdisciplinary lesson or unit. Here are several optional teaching extensions that can enhance the cooking and learning experience in your classroom.

- Plant seeds with your students in paper cups that you can make from newspaper. If you are lucky enough to have a garden, grow ingredients from some of your favorite picture books.
- Have the students research a particular fruit or vegetable and see how it is used in different cultures around the world.
- Meet the farmers who grow your food – go to the farmer’s market or visit a local farm. You can even Skype with a farmer, if going on a field trip is not an option for your group.
- Go on a scavenger hunt at the farmer’s market or at your local grocery store. Where does the produce come from? Learn about food miles and brainstorm the environmental impact from food that is not local.
- If you live in a coastal region, see if your students can take a field trip on a fishing vessel. Follow up by teaching the children to cook what they have caught.
- Visit a local restaurant and watch the chef in action. Can you use those same techniques with your students?
- Assemble and decorate a cookbook filled with heirloom family recipes from your students
- Do an Iron Chef challenge with students who are comfortable with several cooking techniques.
- Host a recipe contest and have teachers act as guest judges. The winning recipe can be added to the principal’s newsletter or can be served as part of the lunch program.

If you and your students enjoyed this lesson, please stay in touch.



Please contact me if you would like customized lesson plans designed to fit with some of your favorite units or enhance specific standards.

Thank you to the artists and designers who created the elements featured in this product!

Melissa Sands Designs, Oh So Random
Kitchen Graphic Element Kit by Violet LeBeaux
Social Media Icons by Craftiments
GiftSeasonStore on Etsy
Math In the Middle

