

Grow A Salsa Garden

Plant Science, Technical Writing, Math

Time: 30 - 45 minutes

Grade Level: 3-12

Materials:

- P.L.A.N.T.S. lesson from Junior Master Gardener curriculum (pg. 130)
- Tomatoes
- Onions
- Green Peppers
- Yellow Peppers
- Orange Peppers
- Black Beans
- Cilantro
- Limes
- Garlic
- Tortilla Chips
- Blender (Two is better)
- Disposable Cutting Boards
- Paring Knives, or Plastic Knives
- Small clear cups or bowls to serve and eat salsa out of
- Colorful platters to display the veggies on
- Canning Jars
- Funnel
- Labels
- Markers
- Music to Salsa dance to!

For Fruit Salsa...

- Banana's
- Strawberries
- Peach
- Mango
- Vanilla Yogurt
- Lemons
- Lime
- Kiwi

Standards:

Standard 3:Life Science

Standard 5: Science and Technology

Objectives

- Learn the plant requirements for growth and length of time from planting to harvest. (Junior Master Gardener Handbook)
- Learn how to make Salsa!
- Make the connection of where their food comes from.
- Practice technical writing skills by writing their recipe and designing the food label.

Background:

This lesson gives students a literal idea of where their food comes from and the processing that takes place with many of our foods. They will actually grow several of the foods that are included in their salsa recipe. They will design a recipe and run it by a "taste test" panel. They will discuss marketing and the economics of producing home grown foods. They will compare commercially processed salsa's from the store with their home grown and processed salsa.

Ahead of time...

Grow Your Own Ingredients

Teacher and students plant seeds to raise tomato and hot pepper seedlings, or arrange with a greenhouse to have this done!

1. Have students determine Salsa Ingredients.

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2. Now have them determine what nutrients plants need to grow.
3. Use P.L.A.N.T.S. lesson from Junior Master Gardener Curriculum

Students determine time from planting to harvest using the growing guide from Kansas State University Research & Extension or from Junior Master Gardener pg. 130.

P = Place Students learn how to transplant a seedling into an outdoor plot or larger container garden.

L = Light

A = Air

N = Nutrients (Students learn how to take a soil sample)

T = Thirsty (Water)

S = Soil

Students plant their seedlings and keep an observation log of their growth measuring the height of the plant and observing root growth.

Idea: Have a Harvest/Fresh Salsa Party at end of school to celebrate...or later in the summer?

Have A Math Moment!

1. Have a poster with the prices of the foods the students have used. For Example in the Fruit Salsa, Banana's are \$59 per pound.
2. Have them weigh their banana and figure out how much it is worth....\$about 21 cents
3. Have them add up the cost of their ingredients.
4. Have them put a value on their labor (i.e. \$10/hour. It took $\frac{3}{4}$ of an hour to produce. Cost for labor = \$7.50.)
5. Have them determine a price they are willing to sell their salsa for. They may want to consider how many more jars they can make in an assembly line process in $\frac{3}{4}$ of an hour. This will reduce their cost of labor.
6. Have them compare this with the cost of a salsa product in the grocery store ads in their local paper. How do they compare?

Idea: Students can also produce a video, or act out an advertisement in class, to help with marketing their product. They may want to consider freshness, flavor, support of local students, etc....

Engage

- Students will work in pairs or groups of three to research and to complete the lesson.
- Students will determine ingredients needed for salsa by studying recipes. (Go to www.kidsacookin.org to view a salsa recipe.)
 - Teacher will have a number of ingredient choices on display. Students need to design their own recipe (enough for 1 pint of salsa).
 - The Ingredient Display could have: Sweet Bell Peppers (yellow, green, red); Garlic already diced in a jar; Roma Tomatoes; Jalapeno peppers or Anaheim peppers; Lime; Black Beans, Fresh Cilantro, Salt; Pepper; Onions, Can of sweet corn; pitcher of water. If adventurous you could provide ingredients for a fruit salsa (it's also good with tortilla chips: Banana, strawberries, vanilla yogurt, peach, apple, orange juice, kiwi, papaya; pitcher of water.
 - Youth teams may pick five or six ingredients to make their recipe from. They must write down the exact directions for the recipe. The teacher will provide measuring devices such as measuring spoons and cups, cutting boards, paring knives, two blenders, a dishwashing tub, a dish towel, paper towels.
 - Youth design their recipe and write it on an index card complete with a name for their recipe. They may also want to have one member of the team design a label... caution them not to take too much time on label design.
 - Teams then present their "shopping" list to the teacher who fills their order on a sturdy plastic plate. The team



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returns to their table to make the recipe. If they need a blender they must wait their turn and must clean it for the use of the next team.

- Each team puts their recipe thru a funnel into a pint canning jar and puts on lid and band. Turn the Salsa music up and have the kids dance salsa or cha cha cha steps to the music! This is to provide physical exercise while "mixing" the recipe.

Explore

- Next the teams pour some of their mixture into a small bowl and present their recipe to the rest of the class (each student then gets to taste test with tortilla chips.)
- Students vote on the top pick so we find the "people's choice" for the vegetable and the fruit salsa.
- Finally, combine all the recipes into one big bowl for a Super Salsa Experience!

Explain

Where does your food really come from?

While the kids are snacking, you can do a bubble graph that takes the tomato in the salsa and traces it back to it's origin at a tomato farm.

Salsa – canning facility, tomato crushing factory, harvest truck, harvest machine, truck garden or farmer's field, seed, parent tomato that was genetically designed to be firm, red, juicy, fleshy, to withstand freezing temperatures... you may have pictures of tomato harvest or a processing factory from on-line research you can share with the students. Food is grown by farmers so we all don't have to grow our own food. We can do other things since we don't have to worry about our food supply. We have enough food. We have very safe high quality food. We have food that doesn't cost a lot compared to many other countries.

Expand

- Have students investigate food labels on some already prepared salsa from the store. Have each group determine the difference between ready-made and home-made salsa.
- Do a contract/comparison table where they identify the differences between the two products. Color, shelf-life, texture, preservatives, eye-appeal.
- Have them list advantages and disadvantages of making home-made salsa.
- Have them identify times and for whom they would like to make their recipe again.

Idea: You could also formulate a Salsa recipe book for parents and grand parents... or for a classroom fund raising experience.

