

Farm-to-Pizza

A fun, hands-on lesson plan to help connect Elementary students with locally grown foods.



Grade Level

This lesson plan can be easily adapted to all grade levels. – even adults, however, this lesson plan is written for K-4 students. Please see page two for applicable Michigan Curriculum Standards and Benchmarks.

Getting Started

- You will need a clean workspace for students to prepare their pizzas individually or in teams of two people if using whole wheat pita bread as your crust. School cafeterias work well but it is possible to do this in a classroom.
- You do not need to cook the pizzas. Cooking is optional. Students eat them even when they aren't cooked.
- You need to set up work stations with cutting surface, knives and veggies before students arrive.
- It is great to have a few parent volunteers or older students help students cut their fruits and vegetables.

Lesson Plan Agenda

- Wash hands put on plastic gloves if using.
- Introduction of locally grown fruits and veggies that be will used on the pizza through a story.
- Ask students to identify what part of the plant they are eating.
- Knife Skills Lesson
- Students cut fruits and veggies. Place cut items on buffet bar.
- Students build their pizzas.
- Students eat their pizzas.
- Students use positive descriptive words to talk about their pizza and the new fruits and vegetables they tried.
- Optional debriefing and follow-up activities.

This lesson may be used freely without permission. If duplicated or distributed, we request proper citation. Lesson plan developed by: Kendra Wills, MSU Extension Educator working to promote community-based food systems. www.msue.msu.edu

MICHIGAN STATE UNIVERSITY | **Extension**

MSU Extension programs and materials are open to all without regard to: race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status.

List of Supplies:

- Sturdy plastic knives or pairing knives if working with 3rd or 4th graders
- Cutting boards or paper/plastic plates
- Hand sanitizer
- Aluminum foil (if cooking pizzas)
- Paper towel
- Plastic gloves
- Small paper bowls

Food Supplies:

- Whole wheat English Muffins or whole wheat pita bread for pizza crust
- Pre-made pizza sauce
- Shredded mozzarella cheese (try and get local cheese)
- Pizza Topping Ideas. Purchase From a Local Farmer or Farmers Market:
 - Whole spinach leaves
 - Basil leaves
 - Feta cheese
 - Roma or cherry tomatoes
 - Red or white onion
 - Green, red, yellow, orange pepper
 - Black olives
 - Michigan black beans
 - Shiitake mushrooms
 - Marinated artichoke
 - Roasted red peppers
 - Pineapple (non-local)

Applicable Michigan Curriculum Standards and Benchmarks:

(Based on the 1996 Michigan Curriculum Framework and the 2000 Science Benchmarks)

- **Social Studies**, Strand II. Early Elementary. Describe how people use the environment to meet human needs and wants. Suggest ways people can help improve their environment. Identify locations of significance in their immediate environment.
- **Social Studies**, Content Standard 4. Early Elementary. Identify examples of markets they experience in their daily lives. Distinguish between producers and consumers. Describe how the choices they make, may impact business decisions.
- **Social Studies**, Content Standard 5. Later Elementary. Trace the national origin of common household items and the trade flows which brought them to the United States.
- **Social Studies**, Strand IV. Students will use the knowledge of the production, distribution and consumption of goods and services to make personal and societal decisions about scarce resources.

Learning Objectives

- To learn more about what kinds of fruits and vegetables are grown in Michigan and the local community.
- To understand the difference between fruits and vegetables from a horticultural perspective.
- How to properly cut fruits and vegetables.
- To understand what parts of the plant we are eating of various kinds of fruits and vegetables.
- To understand how purchasing food from a local farmer can help their community.
- To understand the terms: producer and consumer. (Talk about this when reading The Vegetables We Eat.)



Time Needed to Conduct Lesson

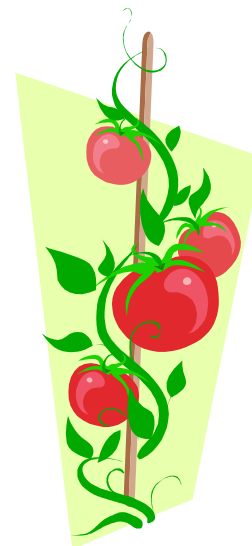
10 minutes of preparation time.

30 – 45 minutes to prepare and eat pizzas.

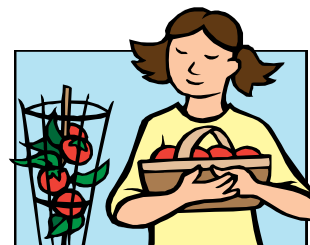
10 minutes of clean-up time.

If you do decide to cook the pizzas (in your school oven with the help of food service staff works best) you need to allow about 8 minutes for cooking time.

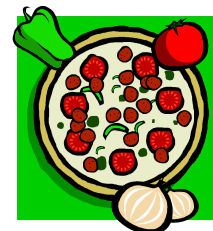
You also need to allow time to discuss your pizza and debrief the lesson. This takes approximately 5 – 10 minutes.



Detailed Lesson Plan

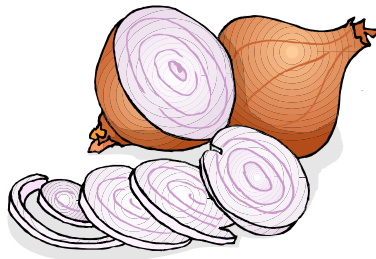


- **Preparation:**
 - Make a list of supplies needed for the number of students.
 - This about if you want to give every student two halves of an English muffin or just one half. If it is right before our after lunch, one half is probably enough.
 - However, if you can give students two halves, you can tell them they have to try new things on one pizza and then they have the other half to make a pizza how they want to.
 - Purchase supplies or arrange for school kitchen to purchase them for you.
 - Think about how you will have the students work. Will you have them in groups of four at small tables? Will they work individually? You will need to prepare small dishes of pre-sliced fruits and vegetables to supply your groups/tables.
 - Prepare largest slices of onion, pepper, tomato, and other veggies that students will dice with their knives. This saves time.
 - Prepare dishes of shredded cheese.
 - If you are cooking the pizzas, work with the school kitchen staff. Ask for large trays to put the pizzas on and maybe a cart on wheels to transport them to the kitchen.
- **Make sure students wash their hands and all surfaces are clean.**
- **Introduce the lesson plan and the learning objectives. You may want to prepare flip chart notes or you can use the Power Point prepared by a MSU Dietetic Intern.**
- **Give a knife skills lesson. This is educational even if kids are using plastic knives.** View videos for tips on how to teach proper knife holding and cutting skills.
- **Have students work in groups or individually to cut vegetables.** Ideally, what they cut should go on their own pizza but if kids are careful, you can have them cut for the whole table.
- **Students build their pizzas.** Ask them to put as many colors on their pizza as they can. Tell them there should be green on their pizza. You can tell students on half of the muffin is the rainbow pizza and the other one can be the way they like it. They will have to try both pizzas.
 - Have student practice using polite table manners. “Please pass the....”
- **Cook pizzas. This is optional.** Students really do like it even if they are not cooked.
- **Plan on reading the book The Vegetables We Eat by Gail Gibbons.** If you are working with elementary students. This will explain many of your learning objectives for this audience. Be sure to discuss definitions for producer and consumer. You can decide if you want to read this before you make your pizzas or while students are eating their pizza. The Vegetables We Eat is available through Amazon. This also may be available through your local library at no cost.
- **Eat pizza and debriefing.** See page 5 for debriefing ideas.
- **Clean-up.** Have students help out.
- **Complete evaluation form** and submit via email or mail.



Teacher Prep: Locally Grown Foods

- View the fact sheet on Michigan grown fruits and vegetables:
http://www.michigan.gov/documents/mda/MDA_Crops_Brochure_low-resolution_324586_7.pdf
- View the fact sheet on Michigan Agriculture at this link to learn about what is produced in Michigan:
<http://www.agclassroom.org/kids/stats/michigan.pdf>
- Review the Michigan good Food Charter at <https://www.michiganfood.org/> and learn more about how purchasing locally grown foods can support your local community.
- Visit a local farmers market. Purchase food for this lesson at the farmers market. Talk with growers about what they grow .
- Look for a guide of local farms that are open to the public in the fall. You may want to send this home with your student s and encourage parents to visit a local farm and learn more about locally grown and produced foods.
- Talk with your school food service staff about locally grown or produced foods served in school meal programs. Resources on farm-to-school efforts can be found at <http://www.mifarmtoschool.msu.edu/>



Knife Skills Talking Points

- Always hold a knife handle with a firm grip. Hold near the point where the handle touches the blade.
- Point out that you can't write with a pencil if you don't have a firm grip close to the tip of the pencil. The same is true for a knife.
- Explain that sharp knives are safe knives. Dull knives don't cut well and this creates accidents.
- The hand holding the item to be cut should be in the shape of a claw with fingers tucked in. This feels strange but will prevent fingers from being cut.
- There are two main cutting techniques: the slice and the chop. Demonstrate both to students.

Teacher Prep: Knife Skills

You may want to review these videos ahead of time to communicate to students how to properly cut their fruits and vegetables:

Basic Knife Skills: Slice and Chop

<http://www.youtube.com/watch?v=i2-SbDS2hc4&feature=relmfu>

How to Dice an Onion

<http://www.youtube.com/watch?v=aDjNI5gs4nM>

How to Dice a Roma Tomato

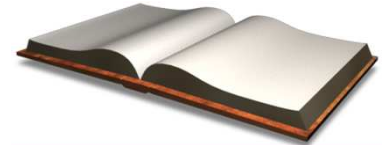
<http://www.youtube.com/watch?v=tfT9i5Kj3-0&feature=relmfu>





Lesson Plan Debriefing Ideas

1. Tell students you want to hear them use descriptive words to talk about their pizza. Tell them you don't want to hear "gross" or "disgusting." You want positive words. Do remind them that it is okay to not like something as long as they try it first. Go around the room and ask students to give you one descriptive word to talk about their pizza. Words you are looking for might be: delicious, crunchy, spicy, fresh.
2. Ask the students to raise their hands and tell you one thing new they tried today and whether or not they liked it. Most students try something and do find they like at least one new fruit or vegetable.
3. Ask students if they have ever visited a farm. Discuss what they observed and what foods are made locally.
4. Ask students if they have a garden at home and grow some of the vegetables on their pizza.
5. Ask students if they have ever shopped at a farmers market. Discuss how this supports local farmers.
6. You might want to provide parents with the recipe for these pizzas so they can make them again with their family members at home.



Farm-to-Pizza: Optional Add-On Ideas

You may use or modify the handout for students to take home. This explains the lesson and how to make pizzas at home. This handout was prepared by a MSU Dietetic Intern.

Math Extensions

There are all kinds of math lessons with fractions you can do with pizzas.

You could make a graph of how many people ate each topping.

You could calculate the cost of each pizza using the cost of each of the inputs and dividing it by how many pizzas were made. You could calculate labor costs as well as talk about a possible profitability model for a pizza business.

Get creative! Students love real world examples and they love pizza!

Pizza or Vegetable Themed Books

The Little Red Hen (Makes a Pizza) by Philemon Sturges

The Princess and the Pizza by Joan Holub

Tops and Bottoms by Janet Stevens

Resources for Growing a Pizza Garden

Grow Your Own Pizza: Gardening Plans and Recipes for Kids by Constance Hardesty

Sign up for donated seeds for a school garden from Seed Savers Exchange at

www.seedsavers.org

Farm-to-Pizza Evaluation Form

Grade Level: _____ **School:** _____ **Date:** _____
County: _____ **Instructor:** _____

Do you think your students enjoyed this lesson? Please explain.

Do you think your students gained knowledge about where food comes from?

Is there anything you would change about this lesson?

Would you recommend this lesson to other teachers?

Would you be willing to add your name to your statement above (recommendation) for future lesson plan promotional materials?

MSU Extension programs receive funding support from the State of Michigan and the United States Department of Agriculture. We are requested to report on the populations our programs serve. Can you please take a few moments to fill in the following information for your class:

Number of male students attending today's lesson: _____

Number of female students attending today's lesson: _____

Estimated number of students that live in a city, village or township under 10,000 population: _____

Estimated number of students that live in a city or town between 10,000 and 50,000 population: _____

Racial-Ethnic Distribution. Please indicate the number of students in each category.

_____ Hispanic or Latino _____ African American _____ American Indian or Alaskan Native

_____ White or Caucasian _____ Asian _____ Multi Racial _____ Native Hawaiian or Pacific Islander

**Please submit this completed evaluation form to: Kendra Wills Kent/MSU Extension 775 Ball Ave NE
Grand Rapids, MI 49503 willsk@anr.msu.edu Tel: 616-336-2028 Fax: 616-3836**