

## **Objectives:**

Projects and activities that will increase the students understanding of Agriculture:

1. NYS Farmers produce all the ingredients needed to make a pizza
2. Language arts; words describing favorite pizza, older students helping younger students with activities and games
3. Math; graphing;            Older student - poll of students' favorite pizza toppings  
   Younger student - shapes on a pizza
4. Nutrition; use food pyramid
5. Science: Seed Anatomy
6. Life skills: Performing as a team member, assisting team members to mimic working on a farm where everyone works together to get the crop planted/harvested

The Materials contained in this kit:

1. Poem A Pizza As Big As The Sun, by J. Prelutsky
2. History & Facts: Pizza comes from the farm
3. Food Pyramid: NYS products and suggested activities
4. Pizza game and directions
5. Craft & activity suggestions; making a pizza book, pizza collage

## **Did you know?**

- ★ People in the U.S. consume 2,000 billion pounds of onions a year.
- ★ Each year, Americans consume nearly 3 billion pizzas.
- ★ Each American eats an average of 46 slices (23 pounds) of pizza a year.
- ★ Each day, Americans eat enough pizza to cover nearly 110 football fields (approximately 110 acres of land)
- ★ New York State produces every product used in pizza making except Olive Oil.

Suggested reading to further enhance the project:

Extra Cheese, Please!

Farming

From Seed to Plant

Tomatoes

Wheat

Vegetables in the Garden

Project One: Read the poem.

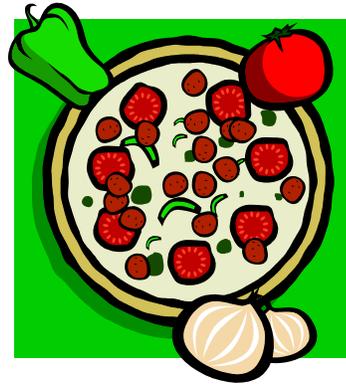
Pizza As Big As the Sun by J. Prelutsky

I'm making a pizza the size of the sun,  
A pizza that's sure to weigh more than a ton,  
A pizza too massive to pick up and toss,  
A pizza resplendent with oceans of sauce.

I'm topping my pizza with mountains of cheese,  
With acres of peppers, pimentos, and peas,  
With mushrooms, tomatoes, and sausage galore,  
With every last olive they had at the store.

My pizza is sure to be one of a kind,  
My pizza will leave other pizzas behind,  
My pizza will be a delectable treat,  
That all who love pizza are welcome to eat.

The oven is hot, I believe it will take  
A year and a half for my pizza to bake-  
I hardly can wait till my pizza is done,  
My wonderful pizza the size of the sun.



Discuss what the students like on their pizza and graph results.

Ask the question: "Where Does Your Pizza Come From?" Have them vote:

(Name your local \_\_\_\_\_) Pizza Shop? The Grocery Store? The Farm? Your Home?

Use the resources included that explain each product on the pizza and how it comes from the farm, also how and where each product is grown.

Facts:

1. There are farmers all over the world; many grow foods that can be used for pizza. We will concern ourselves with products grown in New York State.
2. Each region of NYS has soil that is appropriate for different types of farming. Discuss what is grown in your area.
3. NYS ranks: #1 in USA for production of cabbage (what would a cabbage pizza taste like?) ranks #2 for sweet corn, beets and apples (would you like them on your pizza?)
4. Milk is NYS's leading agricultural product (how would use milk with your pizza?) Ranking #3 for pizza cheese (Mozzarella,) all cheese is made from milk. (also #1 for cottage cheese and dried milk.)

Personalize:

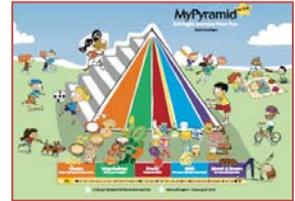
What County is our school in \_\_\_\_\_?

Can you think of pizza products that grow in our county \_\_\_\_\_?

## Project Two

Nutrition: If possible have a pizza party or make English muffin pizzas using a toaster oven. (Halve muffins, let each child use toppings as you have provided, and toast long enough to melt cheese).

1. Using the food pyramid poster, align pizza ingredients to the pyramid.
2. Discuss what other foods you need to include with your pizza to have a balanced meal.
3. Discuss wise decisions as to the drink that should accompany the snack
4. Have students design a healthy breakfast pizza or a dessert pizza using only NYS produced products.



## Project Three

The science of pizza; How can I grow a pizza?



1. How does the cheese grow? Grass grows in the soil, a cow eats the grass, the cow makes milk, the farmer milks the cow, the milk is used to make cheese, and the cheese is sprinkled on top of the pizza.



2. How does the crust grow? Wheat grows in a field and is harvested, the wheat is ground into flour, the flour is mixed with water to form dough, and the dough is stretched into a circle for a pizza crust.



3. How does the sauce grow? Tomatoes are grown in the soil, chopped up and cooked up and cooked into a sauce, herbs like thyme and oregano and garlic and onion for flavor, and the sauce is added to the top of the crust.



4. Where do the toppings grow? Bell peppers are plants grown in soil and they come in lots of colors – red, yellow, orange, even purple – when they are fully ripe. Onion bulbs are grown underground. Mushrooms are fungi and grow by absorbing food materials from their growth area. Olives are small, round fruits that grow on trees (but not in NYS).



5. How can the pizza box & paper products used be considered agriculture products? We plant pine trees to make paper and cardboard. The wood is harvested and turned into pulp which is used to make cardboard and other paper products. Glue used to connect the pizza box pieces is made from corn. Soy beans make ink that is used to print the words on the box.



6. Discuss ways you can use recycling methods with this project.

\*\*\*see support material for more in depth growing descriptions.

Growing wheat in your classroom. (labeled zip loc bags contain materials)

1. Observe the growing process, Place a few wheat seeds between wet paper towels and watch the germination process. What is the percentage of germinated seeds vs. ungerminated seeds?
2. Plant a few seeds in film containers. Set up simple experiments with the seeds, by placing them in the light, in the dark, warm, cold. Compare and measure growth.

## Project Four

Two activities can be used with this same material.

1# Pizza game; A game model is included as well as directions that you can use so students are able to make individual or team games.



Materials for the game are: Dice, Brown lunch bag (crust); 4" x 8" Red rectangle – (sauce); 6 small brown circles (pepperoni); 4 small white rectangles (mushrooms); 2- 4"x3" yellow squares (cheese); 5 small green triangles (peppers); (Individual pieces can be stored in the lunch bag crust)

Directions for playing the game: Hand out lunch bags to individuals or teams. Dump pizza parts into the center in a box top so pieces are not lost. The die is rolled; what ever number comes up is compared to the number count assigned each pizza piece, as follows:

Die roll: #1 = pizza crust # 2. = sauce #3 = cheese (1 square, they will need the second #3 to come up to put the second piece of cheese on their sauce) #4 = pepperoni #5 = peppers #6= mushrooms

The point is to be the first to complete the pizza, using the following sequence: crust, sauce, cheese, pepperoni, mushrooms, and peppers.

(Depending on time allowances and participant attention span you decide whether one correct number rolled equals all pieces of multiples or separate pieces of multiples i.e. die roll #5: student can put all pepper pieces on or only one at a time for each die roll)

\*\*\*If possible let each student make their own game to take home.

## #2 Pizza Game - Barter systems for your pizza

Divide students into 6 groups. Pass out game pieces so one team has all the crust (brown paper bags) another team has all the sauce, etc. until all game pieces are used. Explain the task of each team is to barter with the other teams until a team has a complete pizza.

What happens if we want to put bananas on a fruit pizza – could we trade NYS cheese for bananas from Costa Rica? Name other NYS products could we trade to get the ingredients we can't produce. What happens if a trucking company has all the ingredients and the truck drivers go out on strike?

Products grown in New York State that could be used for pizzas:

### Fruits

apples  
apricots  
berries  
cherries  
peaches  
strawberries

### Vegetables

asparagus  
beans  
broccoli  
garlic  
onions  
peppers  
spinach  
tomatoes

### Grains, etc.

milk & dairy products  
beef, pork, chicken, veal  
honey, maple syrup  
eggs  
seafood  
mushrooms