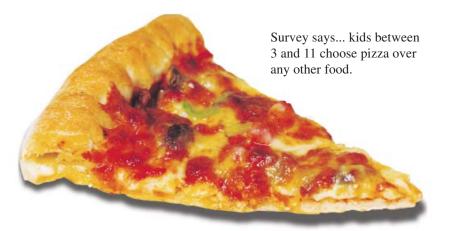


## **Surprising Slices**

Each of us eats about 23 pounds of pizza a year. That's about 46 slices.

The average family eats pizza at home 30 times a year.

We eat more pizza during Super Bowl Week than any other week of the year.



#### **Tomatoes**

Pizza sauce is made from tomatoes. Tomato plants take 75 to 85 days to produce ripe fruit. The seeds are usually started indoors and then transplanted outdoors after the seedlings are four to six weeks old. In gardens or greenhouses, the plants are supported with stakes to keep them from falling to the moist ground. When tomatoes are ripe, they are carefully packed into boxes and sent to grocery stores. Some tomatoes are sent to canneries where they are processes for sauces or

ketchup. Special herbs such as oregano, dill, and garlic are added to tomatoes used in pizza sauce to give it a special taste.



### Get a Rise Out of Yeast

When warm water is added to yeast, it activates enzymes in the dough that convert starch into sugar. Carbon dioxide gas is created and the gas bubbles cause the dough to rise. The gas bubbles remain trapped in the bread and give it a light, airy texture.

Try this experiment to see yeast in action:

- 1. Mix a teaspoon of sugar and a half teaspoon of yeast in a two-liter pop bottle. Add two or three inches of warm water and shake the mixture.
- 2. Stretch a balloon over the top of the bottle.

What happened? What might happen to the balloon in the next 30 minutes? Would the yeast work faster if you used hot water, cool water, or more sugar?

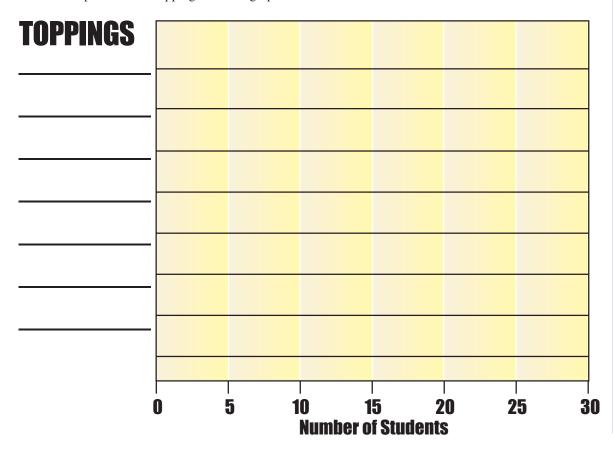


## **Pizza Puzzlers**

• Pizza sales total more than \$20 billion dollars a year. What does your family spend on pizza in a week?

As a nation, we eat 100 acres of pizza per day (1 acre = a football field). That's 350 slices every second! If two slices equals a pound, how many pounds of pizza does your class eat each year?

 Most Americans prefer pepperoni on their pizzas. Oddly, tuna is a popular toppings in Europe. Survey your class to see who prefers what topping. Use this graph to chart the results.



# 7/2 Fabulous Fractions

- 1. Draw a round pizza crust.
- 2. Use a ruler to divide the pizza into two halves.
- 3. Next, divide the pizza into four fourths.
- 4. Finally, divide the pizza into eight eighths so each slice is one-eighth of the whole pizza.
- 5. How many pizzas would you need to give everyone in your class one slice of pizza?
- 6. How many pizzas would you need to give everyone in your class two slices of pizza?

#### Pepperoni and Sausage

Pepperoni and sausage are meats made from hogs. Many Illinois farmers raise hogs. The animals are fed a special blend of ground corn, soybeans, vitamins, and minerals. The hogs go to market in five to six months when they

weigh 240-250 pounds. The meat from hogs is called pork. It is ground up and special seasonings are added to make sausage, salami, hot dogs, bacon,

and pepperoni.

#### Cheese

everyone likes cheese!

Cheese is made from milk that comes from dairy cows. Illinois companies produce more than 102 million pounds of cheese each year. Kraft Foods, a major cheese producer, is located in Northfield, Illinois. Cheddar is the most popular cheese, followed by mozzarella, commonly used on pizza. We all have our favorite pizza toppings, but chances are



Pizza crust is made from wheat. Farmers plant tiny

wheat kernels in the ground using a drill. Wheat looks like fresh new grass when it comes out of the soil. It grows to about 24 inches high. The farmer harvests the wheat and hauls it in trucks or wagons to the country grain elevator. From there it is sold to food companies. There are a lot of steps to make wheat into flour for pizza dough. After the wheat is shipped to a mill, it is cleaned to remove weeds, stems, and other plant material. Then rollers press the kernels to break them into pieces. Finally, the small wheat pieces are shaken onto screens to sift out the bran and germ not used in wheat flour.

Most pizza crusts are made from hard red spring wheat or hard red winter wheat grown in the central region of the United States. Here in Illinois, we grow soft red winter wheat. Illinois wheat has less protein than other types of wheat used to make pizza crusts. However, Illinois wheat flour can be blended with higher protein wheat for use in thin crust pizza.

> Wheat flour is mixed with yeast, oil, sugar, salt, and water to make pizza dough. Yeast makes pizza dough rise. It is a living organism and a fungus related to mushrooms. Today, commercial yeast is grown on beet and cane sugar.

#### **Peppers**

There are many varieties of garden peppers, but the large-fruited sweet pepper is the favorite of most Americans and a popular pizza topping. Peppers grow on small bushy plants. They are usually eaten in their

immature green stage, but they are also delicious after they have fully ripened and turned red or yellow.

#### **Mushrooms**

There are close to 2,500 types of mushrooms throughout the world. There are about 275 commercial mushroom growers in the

United States. Mushrooms grow in cool, dark places. They lack chlorophyll, the green substance used by plants to make food, so they survive by soaking up nutrients from

organic matter in the soil.

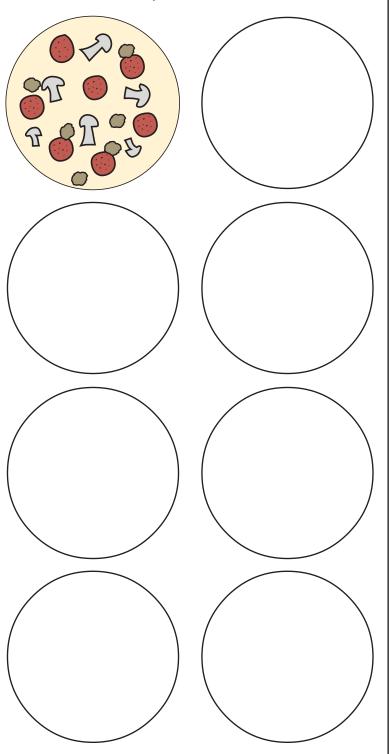


1,100 onion farms in

the United States. Seventy of them can be found in Illinois, on 400 acres of ground. Onions bulbs are raised either from seed or "sets." Onion bulbs grow underground and have long green tops. After they are picked and cleaned, they are either sold at grocery stores or sent to processing plants. At processing plants they are diced or processed to be put into foods such as spaghetti, barbecue sauce, and pizza. Each of us eats about 19 pounds of onions a year.

## Pizza Probability

Pretend you are making pizzas and you have pepperoni, sausage, and mushrooms for toppings. How many different pizzas can you make with these toppings? (None of the pizzas can have the same toppings as any of the others.) Fill in the circles below until you run out of pizza topping combinations. The first one is done for you.



# A Slice of Life

Jeri Zueger Cheese Store Manager Avanti Foods Company, Walnut, Illinois

Describe your job.

I have worked for the Avanti Foods Company for a year and a half. My husband is the company president and I am the store manager. My job is management of store operations and ordering of store stock. Our store sells cheese and pizzas made in our factory. We also sell gifts, specialty foods, kitchen gadgets, sour cream, cottage cheese, and ice cream made by other companies.

What is the history of the Avanti Foods Company?

The original cheese factory was called Walnut Cheese and it opened in 1932. The pizza factory was added in 1965 and the Swiss Chalet (store location) was added in 1977. "Avanti" is Italian for "forward."

Explain how milk from dairy cows is processed into pizza cheese. The milk from dairy farms is shipped to our cheese factory on a daily basis. We pasteurize the milk and add bacteria culture and rennet to curdle it. After it thickens, we cut the milk into curds and whey. We heat the entire vat (container) to 108 degrees Fahrenheit, drain off the whey, and press the curds into 40-pound blocks.

What types of subjects in college helped you with your current job? I learned useful skills at the University of Wisconsin in Madison. My major was Meat & Animal Sciences, but I also had many Food Science classes. My education gave me important knowledge for my job at Avanti Foods

For more information about cheese-making, go to www.realcaliforniacheese.com.

#### Ruth Zeldenrust Vegetable Farmer Chicago Heights, Illinois

How do you produce your tomatoes?

Tomatoes are started as seedlings in the

Tomatoes are started as seedlings in the greenhouse and planted in small trays. Then I transplant them outside in the field. Later, I use a cultivator to loosen the soil and keep the weeds down. Next, I hoe the tomato plants by hand to get the weeds the cultivator missed.

When the plants are about knee high, I pound posts, or "stakes," by every two plants. I tie strings around the stakes to hold the plants off the ground. This makes for easier picking and cuts down on disease and waste. I go back over the rows and prune the bottom branches off the plant. This helps them grow better and produce more fruit.

Then I wait for the rains to come, the plants to grow, and the tomatoes to get big. Tomatoes start off green and then they ripen to red. Some people think tomatoes begin as red in color.

Are any of your tomatoes used for pizza sauce?

I grow two types of tomatoes—regular round and plum. The plum tomatoes are used in pizza sauce because they have more meat, or flesh, inside, for a thicker sauce. Round tomatoes, which have a higher water content, are used in soups, stews, sandwiches, and juice.

To learn more about agriculture visit us at www.agintheclassroom.org, or contact your County Farm Bureau® office or Agriculture in the Classroom, Illinois Farm Bureau®, 1701 Towanda Avenue, Bloomington, IL 61701.