



# **This Little Piggy Goes to School**

Created by

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IFBF Leadership Intern



**This Little Piggy**  
Went to Market



## Market Math

**Grade:** Second through Fourth Grade (as written but could be incorporated in more advanced math classes)

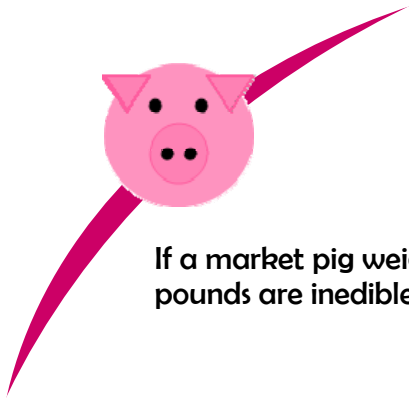
**Subject:** Math

**Objective:** To introduce swine market facts through practical math.

**Standards:** Accurately completes mathematic computations.

**Procedure:** Students can be given these math problems along with assignments as practical or applied math. Or, have students write grade appropriate math problems using agriculture statistics.

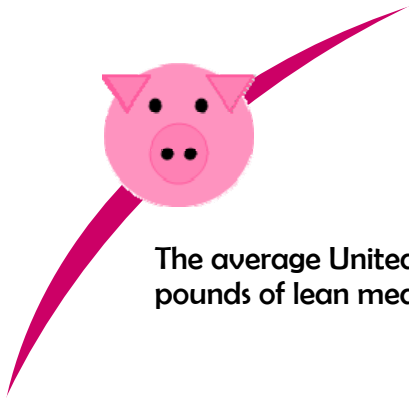
**Source:** Tara Gilbert. Iowa Farm Bureau.



Name \_\_\_\_\_

If a market pig weighs 265 pounds and produces 108 pounds of edible lean meat, how many pounds are inedible?

If the U.S. produces approximately 106,000,000 pigs per year but U.S. citizens require approximately 187,000,000 pigs to produce the desired amount of pork, how many pigs is the U.S. short?



Name \_\_\_\_\_

The average United States citizen eats 67 pounds of pork each year. If a pig produces 108 pounds of lean meat, what percent of one hog does one person eat each year?

What fraction of a pig does one American eat per year?

One pig produces 108 pounds of edible lean meat that can feed up to 135 people. How many pounds of pork does each person get to eat?

There are 16 ounces in one pound. How many ounces are in .8 pounds?

**Grade 2 or 3**

If a market pig weighs 265 pounds and produces 108 pounds of edible lean meat, how many pounds are inedible?

$$\begin{array}{r} 265 \\ -108 \\ \hline 157 \text{ pounds} \end{array}$$

If the U.S. produces approximately 106,000,000 pigs per year but U.S. citizens require approximately 187,000,000 pigs to produce the desired amount of pork, how many pigs is the U.S. short?

$$\begin{array}{r} 106,000,000 \\ -187,000,000 \\ \hline -81,000,000 \text{ pigs short} \end{array}$$

**Grade 3 or 4**

The average United States citizen eats 67 pounds of pork each year. If a pig produces 108 pounds of lean meat, what percent of one hog does one person eat each year?

$$\begin{array}{l} \underline{67 \text{ pounds eaten}} \\ 108 \text{ pounds produced} = .62 * 100 = 62\% \text{ of one hog per person each year} \end{array}$$

What fraction of a pig does one American eat per year?

$$.62 = \sim 6/10 = 3/5$$

One pig produces 108 pounds of edible lean meat that can feed up to 135 people. How many pounds of pork does each person get to eat?

$$\begin{array}{l} \underline{108 \text{ pounds}} \\ 135 \text{ people} = .8 \text{ pounds per person} \end{array}$$

There are 16 ounces in one pound. How many ounces are in .8 pounds?

$$.8 * 16 = 12.8 \text{ or } \sim 13$$



## This Little Piggy Went to Market...Then Where?

**Grade:** High School

**Subject:** Animal Science, English, Media, Speech

**Objective:** To educate students on all the uses of hogs—from exports, to industrial and pharmaceutical uses, and food on your plate.

**Standards:** Animal Science: Describes advances in technology that have affected production.

English: Utilizes print and electronic resources to generate data. Demonstrates proper grammar and usage. Cites research using the MLA guidelines.

Media: Creates multi-media products including a variety of resources. Recognizes and uses appropriate computer applications.

Speech: Effectively presents to an audience.

**Procedure:** Ask students to research where swine products end up following market. They will choose from one of the following four categories: exports, industry, pharmaceuticals and human consumption. Students will be asked to develop a one page handout that summarizes the type of products within each category that rely on co-products of swine. Students should also summarize the importance of the swine co-products they listed and their importance to humans.

A great research starting point is the National Pork Board's Quick Facts book which can be found at

<http://www.pork.org/NewsAndInformation/QuickFacts/default.html>

When all handouts are complete, group students together based on their chosen category (exports, industry, pharmaceuticals, and human consumption). Within the groups, have them choose the handout with the best information and design. Then, as a group, have them share with the class some of the interesting points they found during their research.

Some questions to lead a discussion include:

- From your research, did you find that the majority of swine products remain on the farm?
  - Where did the swine products end up? (which type of industries, which countries)
  - Why do you think swine products, pork included, are exported?
- Can swine be a value added product? (*Note: 'value added' refers to the additional value created through marketing.*)
  - In what way is value added?
  - Who do you think benefits the most from adding value to swine? The farmer, the industry leaders, the consumer? Why?

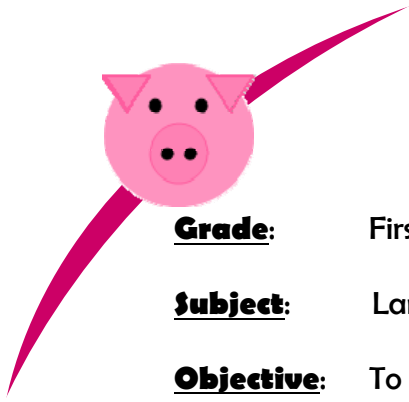
*Note: So all the students in the school can learn this information submit the "Best" chosen handouts to the school paper throughout the school year.*

**Source:** Tara Gilbert. Iowa Farm Bureau.



# **This Little Piggy**

## Stayed Home



## **This Little Piggy Stayed Home**

**Grade:** First through Fourth Grade

**Subject:** Language Arts

**Objective:** To gain an understanding about the types of housing used in the swine industry.

**Standards:** Language Arts: Writes to express self. Uses proper grammar. Spells words correctly. Uses the writing process to develop a story.

**Procedure:** The “This Little Piggy Stayed Home” lesson pairs letter and word recognition with story development. This lesson design has four parts including an opening activity, a word search, a story, and a closing activity.

### **Opening Activity**

Have students share with a partner three features of their house and how those three features make them feel. (i.e. Heat makes me feel warm.)

### **Word Search**

Students should complete the “This Little Piggy Stayed Home” word search puzzle by finding the words provided. This activity allows for letter recognition, word recognition, as well as spelling.

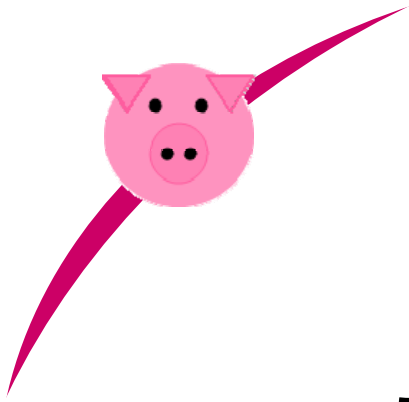
### **Story**

The words found in the word search are used to complete the fill in the blank story “This Little Piggy Stayed Home.” This activity allows students to recognize proper English and grammar, and develop a story.

### **Closing Activity**

Ask the students to discuss or write if they think pigs like to be inside or outside. Have them explain why they think this way and to provide examples. Once complete, ask if anyone wants to share their thoughts.

**Source:** Tara Gilbert. Iowa Farm Bureau.



Name \_\_\_\_\_

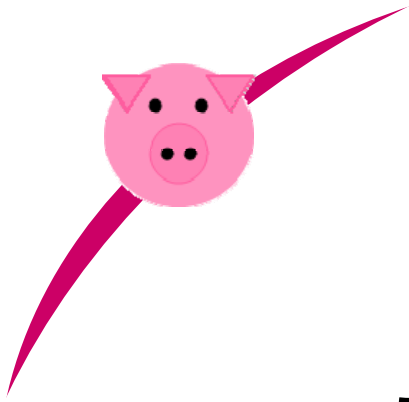
## **This Little Piggy Stayed Home**

E C A P S L A N O S R E P  
P N K N Q G Q T V M X H F  
R P A M N M X T Z H N R R  
O F M H E A L T H Y C E E  
D R H I L R L L M R A T S  
U J T C S N K L O H L A H  
C Y F T R T Z V E D M W F  
T Z T H G H E A X H C H E  
I M L G T X T R M D N S E  
V M J I H E Z H S B B E D  
E L W R D M C K L M J R L  
Q M H B Z C Y Z X V E F R  
K R K F T L T P M H Y J H

Bright  
Fans  
Healthy  
Misters

Calm  
Fresh Feed  
Heated  
Personal Space

Cool  
Fresh Water  
Herd  
Productive



Name \_\_\_\_\_ KEY \_\_\_\_\_

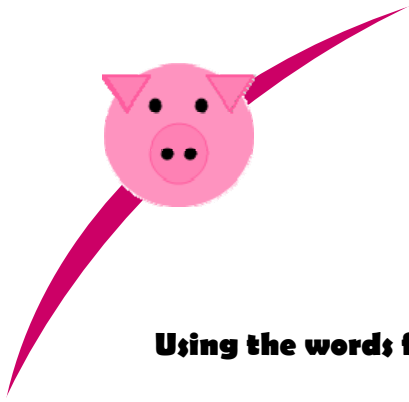
## This Little Piggy Stayed Home

E	C	A	P	S	L	A	N	O	S	R	E	P
P	N	K	N	Q	G	Q	T	V	M	X	H	F
R	P	A	M	N	M	X	T	Z	H	N	R	R
O	F	M	H	E	A	L	T	H	Y	C	E	E
D	R	H	I	L	R	L	L	M	R	A	T	S
U	J	T	C	S	N	K	L	O	H	L	A	H
C	Y	F	T	R	T	Z	V	E	O	M	W	F
T	Z	T	H	G	H	E	A	X	H	C	H	E
I	M	L	G	T	X	T	R	M	D	N	S	E
V	M	J	I	H	E	Z	H	S	B	B	E	D
E	L	W	R	D	M	C	K	L	M	J	R	L
Q	M	H	B	Z	C	Y	Z	X	V	E	F	R
K	R	K	F	T	L	T	P	M	H	Y	J	H

Bright  
Fans  
Healthy  
Misters

Calm  
Fresh Feed  
Heated  
Personal Space

Cool  
Fresh Water  
Herd  
Productive



Name \_\_\_\_\_

## **This Little Piggy Stayed Home**

**Using the words found in the word search, fill in the blanks to complete the story.**

Once upon a time there was a \_\_\_\_\_ of pigs who lived under the stars. They loved spring time and fall. But in the summer they were too hot. And in the winter they were too cold. Mr. Farmer, their care taker, noticed they were not as healthy when the weather was hot and cold.

One hot summer day Mr. Farmer moved them into an environmentally controlled building. The lights made the building \_\_\_\_\_ just like outside. \_\_\_\_\_ blew a soft breeze through the building. \_\_\_\_\_ added a little water to the breeze making the air feel nice and \_\_\_\_\_. The cool temperatures allowed the pigs to be relaxed and \_\_\_\_\_.

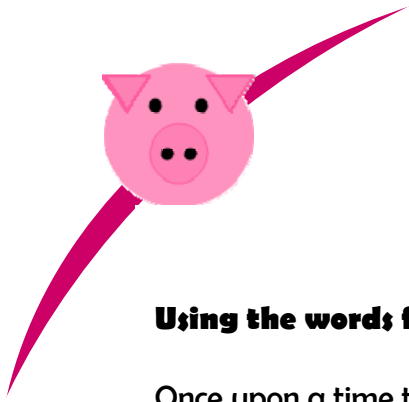
During the winter the building was \_\_\_\_\_ just like Mr. Farmer's house; and the pigs loved being in the warm building away from the cold winter wind.

All day the pigs enjoyed cool \_\_\_\_\_ to drink.

When Mr. Farmer fed the pigs, they ate \_\_\_\_\_ too.

During meal time the pigs enjoyed having their own \_\_\_\_\_  
\_\_\_\_\_ so the pigs didn't have to fight with the other pigs to get their food.

Mr. Farmer moved the pigs to the building so they would be \_\_\_\_\_ and \_\_\_\_\_  
\_\_\_\_\_. The pigs loved their new home, and Mr. Farmer loved it too.



Name \_\_\_\_\_ KEY \_\_\_\_\_

## **This Little Piggy Stayed Home**

**Using the words found in the word search, fill in the blanks to complete the story.**

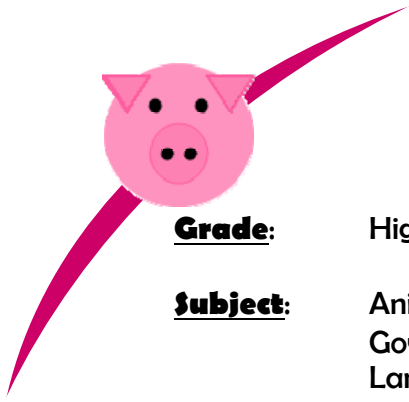
Once upon a time there was a HERD of pigs who lived under the stars. They loved spring time and fall. But in the summer they were too hot. And in the winter they were too cold. Mr. Farmer, their care taker, noticed they were not as healthy when the weather was hot and cold.

One hot summer day Mr. Farmer moved them into an environmentally controlled building. The lights made the building BRIGHT, just like outside. FANS blew a soft breeze through the building. MISTERS added a little water to the breeze making the air feel nice and COOL. The cool temperatures allowed the pigs to be relaxed and CALM.

During the winter the building was HEATED just like Mr. Farmer's house; and the pigs loved being in the warm building away from the cold winter wind.

All day the pigs enjoyed cool FRESH WATER to drink. When Mr. Farmer fed the pigs, they ate FRESH FEED too. During meal time the pigs enjoyed having their own PERSONAL SPACE so the pigs didn't have to fight with the other pigs to get their food.

Mr. Farmer moved the pigs to the building so they would be HEALTHY and PRODUCTIVE. The pigs loved their new home, and Mr. Farmer loved it too.



## Swine Housing

**Grade:** High School

**Subject:** Animal Science  
Government  
Language

**Objective:** To gain an understanding about the types of housing used in the swine industry.

**Standards:** Animal Science: Relates the history of animal rights in the U.S. to present-day attitudes.

Government: Evaluates the effectiveness of various forms of political participation in influencing policy.

Language: Utilizes print and electronic resources to generate data. Demonstrates proper grammar and usage. Cites research using the MLA guidelines. Effectively presents to an audience.

**Procedure:** Students will be broken up into groups representative of “Environmentally Controlled Buildings,” “Hoop Buildings” and “Pasture.” Groups will be asked to research the pros and cons of their respective housing type as well as government regulations being established. Students should be encouraged to think about how the regulations impact both the producer and consumer.

Following research, the groups will be required to develop a PowerPoint poster presentation which outlines the pros and cons and government regulations.

During the poster presentation students will give a brief synopsis of their findings and then open up for questions. Following presentations a discussion can be had in regards to the impacts of government regulations (this could also be completed as a reflection paper). Some questions for the students to think about include:

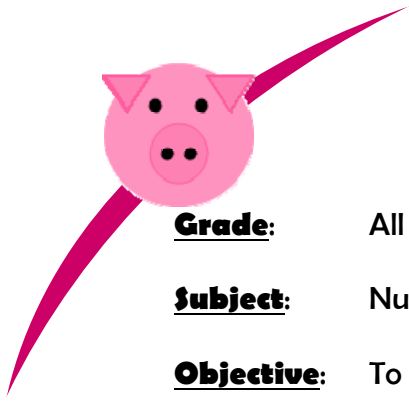
- Do you think government regulations impact the producer positively or negatively? Why? In what ways are the producers impacted?
- Do you think government regulations impact the consumer in anyway? If yes, is the impact positive or negative? Why? In what ways are the consumer impacted?

The posters developed by the students can then be displayed allowing other faculty and students, not in the class, to learn about swine housing.

**Source:** Tara Gilbert. Iowa Farm Bureau.



**This Little Piggy**  
Had Roast Beef



## **Pin the Pork on the Pig**

### *Bulletin Board*

**Grade:** All grade levels

**Subject:** Nutrition

**Objective:** To gain an understanding about where retail cuts of pork come from.

**Standards:** Demonstrates knowledge of meat selection, storage and preparation.

**Procedure:** The “Pin the Pork on the Pig” bulletin board creates an interactive way for students to learn about where pork cuts come from on the pig.

#### **Set up requirements**

Print off an enlarged version of the “Bulletin Board Pig” and place on a bulletin board. Place pins/staples/tape (whichever is age appropriate) and copies of “Bulletin Board Pork Cuts” near the bulletin board area.

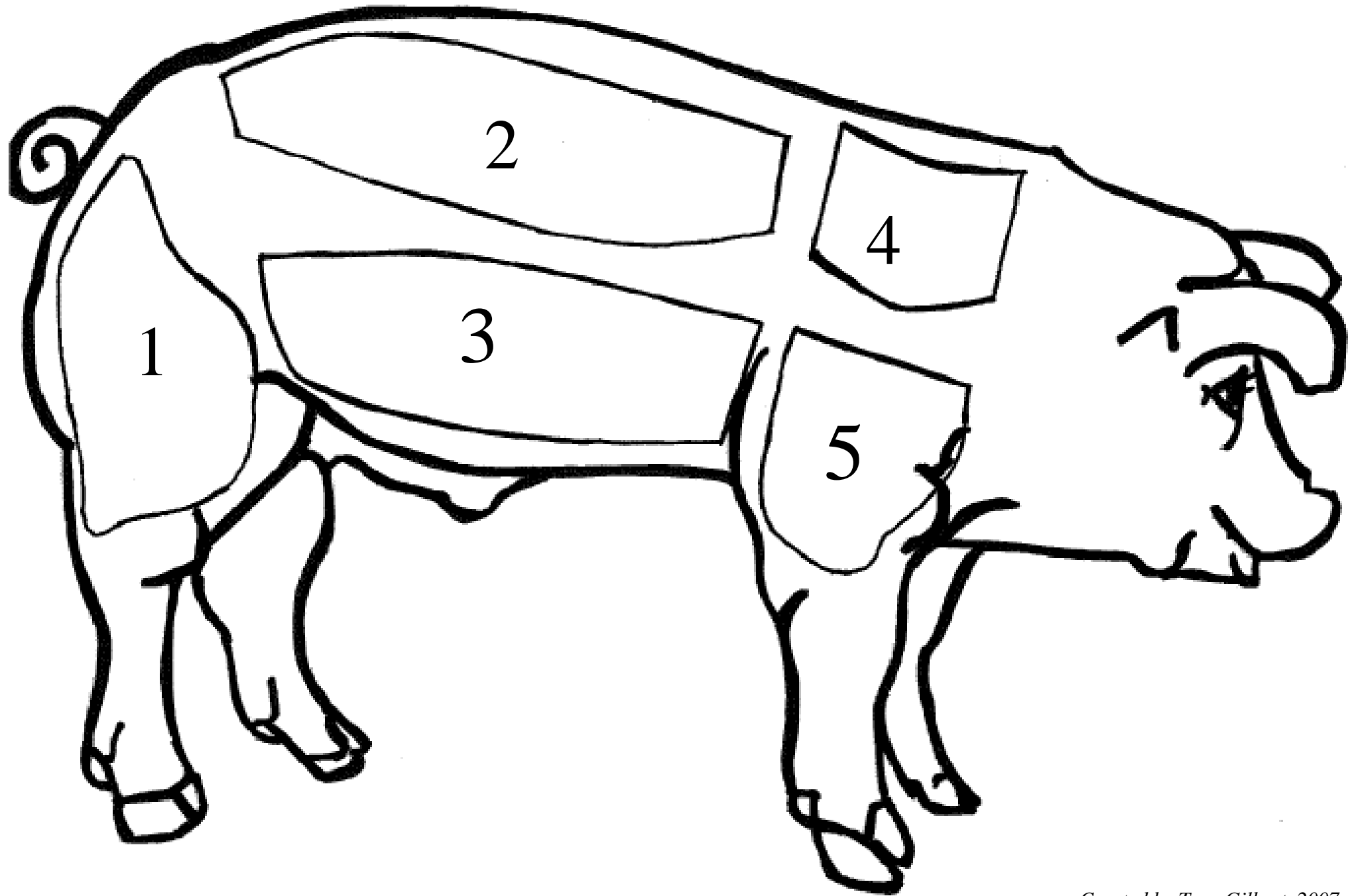
Encourage students to cut out the retail meat cuts and pin them to the area of the pig they originate. At the end of the week, have the class vote on the proper location; i.e. pork chop in location number 2.

As students pin their pork cuts to the pig, they could also fill out the worksheet “Pork Product Location” so they can keep track of how they “voted.”

The student who pins the most pork cuts to the pig correctly could win a prize.

**Source:** Tara Gilbert. Iowa Farm Bureau.

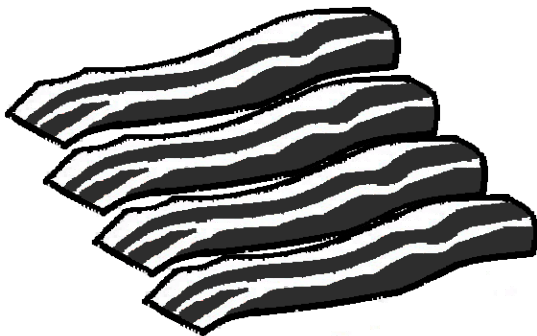
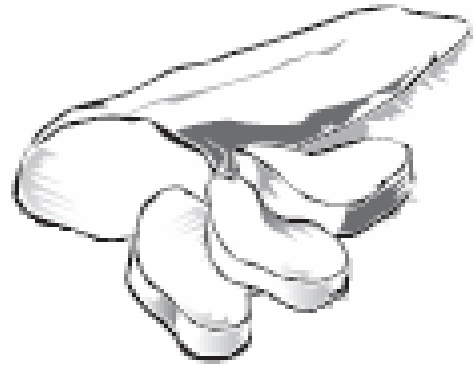
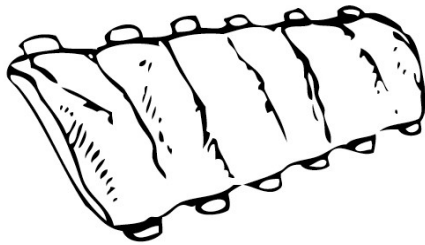
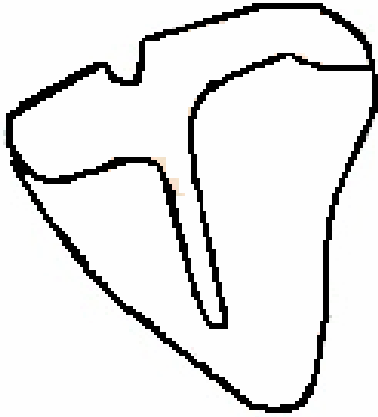
To be enlarged and placed on a bulletin board for kids to pin their meat cuts to.





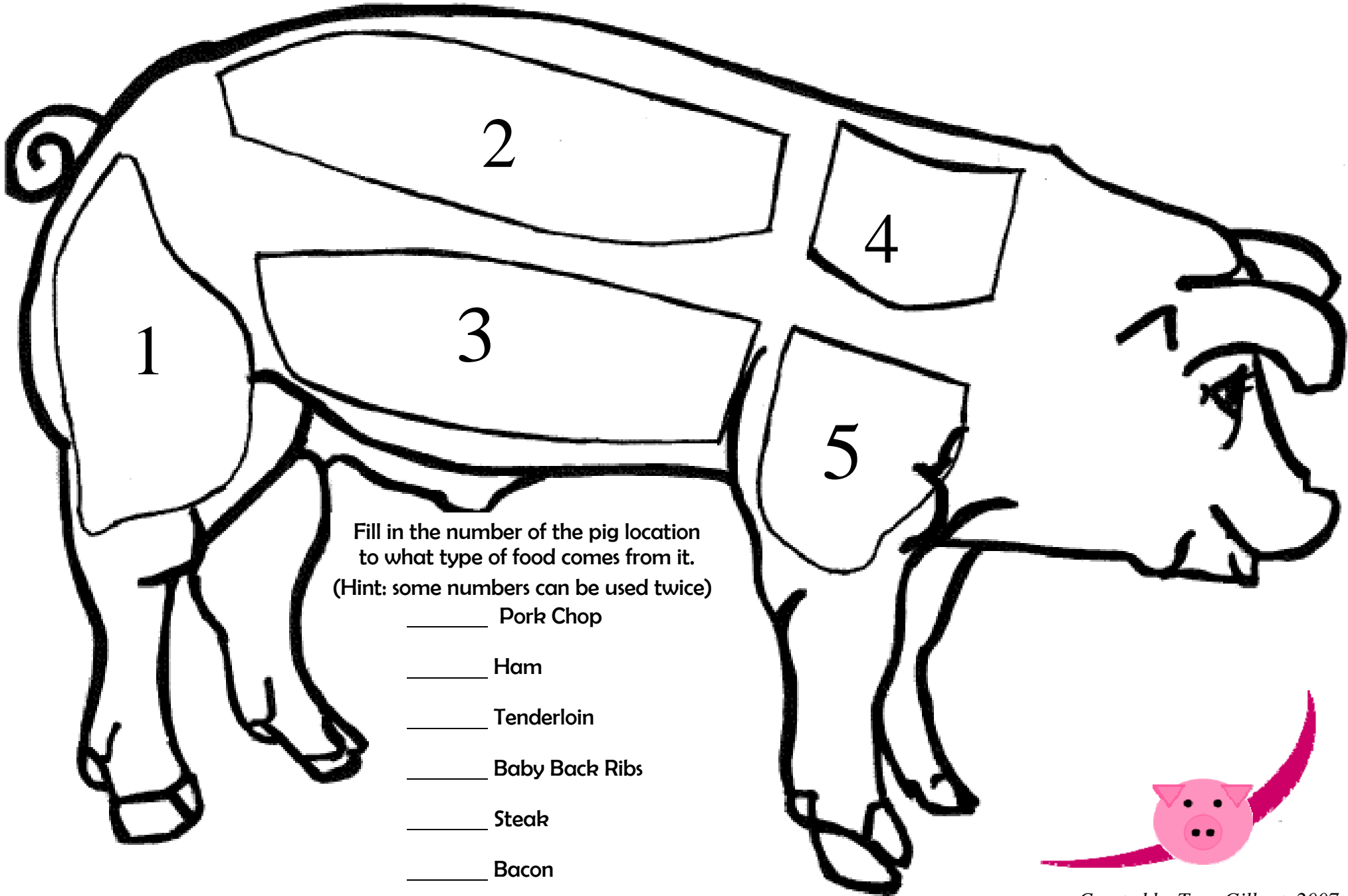
## Bulletin Board Pork Cuts

Cut out these meat cuts and attach them to the area of the pig they come from.



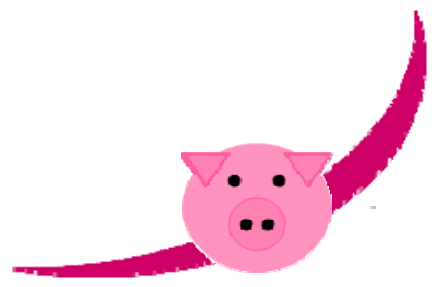
# Pork Product Locations

Name \_\_\_\_\_



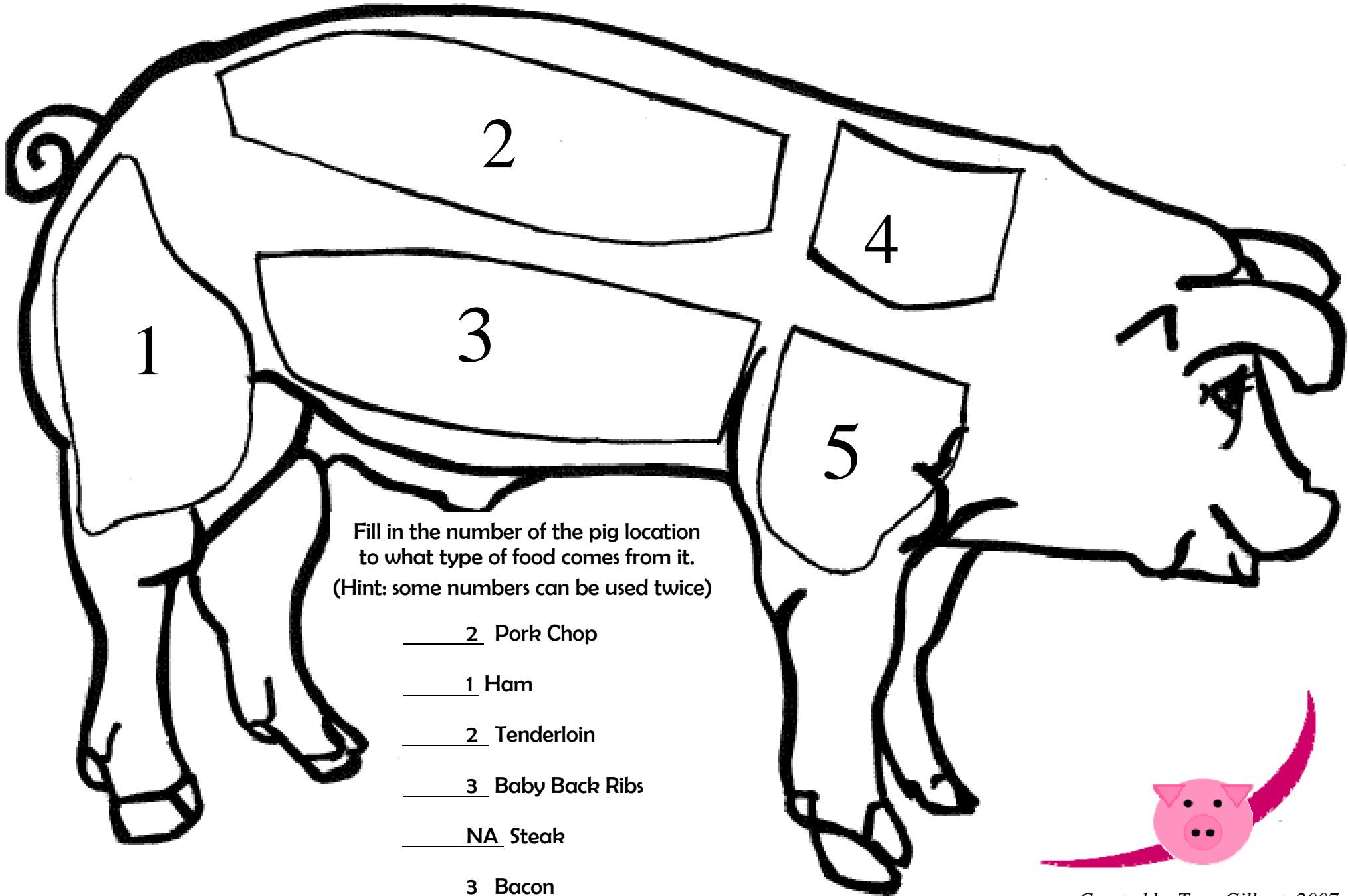
Fill in the number of the pig location to what type of food comes from it.  
(Hint: some numbers can be used twice)

- \_\_\_\_\_ Pork Chop
- \_\_\_\_\_ Ham
- \_\_\_\_\_ Tenderloin
- \_\_\_\_\_ Baby Back Ribs
- \_\_\_\_\_ Steak
- \_\_\_\_\_ Bacon



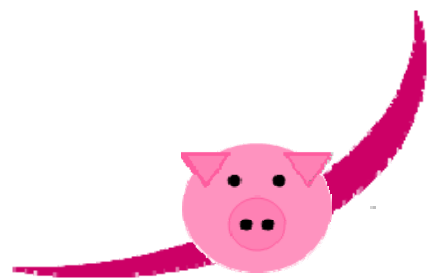
# Pork Product Locations

Name \_\_\_\_\_ KEY \_\_\_\_\_



Fill in the number of the pig location to what type of food comes from it.  
(Hint: some numbers can be used twice)

- \_\_\_\_\_ 2 Pork Chop
- \_\_\_\_\_ 1 Ham
- \_\_\_\_\_ 2 Tenderloin
- \_\_\_\_\_ 3 Baby Back Ribs
- \_\_\_\_\_ NA Steak
- \_\_\_\_\_ 3 Bacon





## Who Drives the Market?

**Grade:** Middle School through High School

**Subject:** Economics, Food Science, Language Arts, Speech

**Objective:** To gain an understanding about market drivers, the effect consumers have on the market, as well as the effect from media and marketing/advertisements.

**Standards:** Economics: (Micro) Explains marketing and distribution. Understands and applies the roles of the consumer.

Food Science: Describes advances in technology which have dramatically affected food production.

Language Arts: Utilizes print and electronic resources to generate data. Demonstrates proper grammar usage. Organizes information in different ways according to the information, problem or question. Cites research using the MLA guidelines.

Speech: Debates an issue, providing sound reasoning for position and evidence of critical thinking. Addresses anticipated concerns of the listener. Avoids logical fallacies when supporting opinion.

**Procedure:** The “Who Drives the Market?” lesson asks students to explore the process of researching to form an educated opinion, presenting their position to others through a written paper as well as oral presentation, and having discussions with those sharing the same position as well as with those who oppose.

The question students will be forming a position on through their research is:  
*Does the consumer drive the meat market? Or does marketing impact the consumers’ needs which then drive the producer to alter their ways of production?*

With this question there are two main positions students may take. Below is an outline of the positions.

*The consumer wants convenient food that is low fat, low in calories, and yet tasty. Does this consumer desire drive the way food is marketed and then produced?*

### The Marketing Effects

- Consumers have become more and more busy, creating a need for food which can be prepared quickly.
- Consumers have become more health conscious which causes the promotion for low fat and calorie food choices.

### The Producer Effects

- Environmentally controlled buildings allow for controlled climates which keep pigs warm preventing them from putting on winter fat.
- Diets for the pigs are higher in protein rather than fat so that there is more muscle and less fat.



*Americans are constantly being reminded of the obesity epidemic and how busy they are. Has this marketing pitch altered the way food is produced—so it is leaner, and more convenient?*

#### The Marketing Effects

- Americans have been persuaded that they don't have enough time in the day and convenience is their answer. This has created a need for food which can be prepared with convenience in mind.
- Americans are encouraged to eat healthier to end the obesity epidemic, which has created a need for leaner meat products.

#### **Position Paper**

After students research these areas and form an opinion, the students should complete a position paper which clearly defines their opinion and the facts which formed their opinion.

#### **Oral Presentation Options**

Have students present their position to the class as a persuasive speech.

#### **Debate**

Following the presentations, group students according to their position. Once in groups, have students compare ideas. Each side will then be given a chance to state their case. When each side has been heard, have the class conduct an open debate/discussion.

#### **Source:**

Tara Gilbert. Iowa Farm Bureau.



**This Little Piggy**  
Had None



## Ag Markets Simulation

**Grade:** High School

**Subject:** Economics

**Objective:** To help students begin to understand agricultural markets.

**Standards:** Understands the Law of Supply and Demand. Uses media to explain the global economics and its effects on the U.S. economy. Explains the various parts of the stock exchange.

**Procedure:** Students will be assigned one of the following four categories: corn, soybeans, hogs or beef cattle.

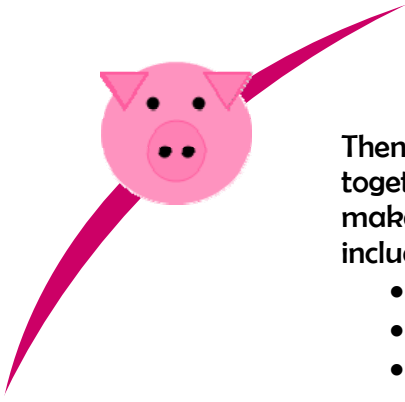
On the first day of the simulation, students will be required to buy 50 units (bushels for grain, and head for livestock) at the closing price of that day. Students will have the option to sell one time during the month (all 50 units must be sold at the same time). This sale can be done at anytime during the month, but everyone's 50 units must be sold by the last day. Students should note which day they sold and at what price so they can determine if they made a good choice. The student should also calculate the amount of money made or lost.

Students must track their respective markets for one month. They should record the closing price of their commodity Monday-Friday each week during that month. The recorded closing prices will be used to create an individual "month in review" chart showing the movement of the market during that month. *Note: Even if students have sold their units they must continue to chart their commodity's closing price every day.*

Some useful websites include:

- Chicago Board of Trade (used for grain markets)  
<http://www.cbot.com/cbot/pub/page/0,3181,972,00.html>
- Chicago Mercantile Exchange (used for livestock)  
[http://www.cme.com/trading/dta/del/product\\_list.html?ProductType=com&crl=f](http://www.cme.com/trading/dta/del/product_list.html?ProductType=com&crl=f)  
(Use the "Pit Traded" option for delayed futures)
- Local Cooperatives or Ethanol Plants (used for grain markets)

*Note: If students choose a local cooperative or ethanol plant the values may differ from each other as well as those on CBOT due to local influences.*



Then as a class, create a master chart to display all four commodities together. As a class, try and reach some conclusions as to what happened to make the markets change. Some of the influencers students can look for include:

- Weather (disasters and favorable weather conditions)
- Foreign markets (i.e. a country opens their borders for trade)
- Bio fuels (bio diesel and ethanol)
- Consumer trends (i.e. Atkins Diet)
- Time of year (planting or harvest/spring or fall)

Also as a class, determine which were the best days to sell each commodity and the best days to buy each commodity based on the graph. Ask students to place a mark on the chart where they sold their 50 units and then determine who sold at the best time for each commodity.

As a debriefing question, ask the students what they think would happen if the U.S. needed to import grain.

**Source:** Tara Gilbert. Iowa Farm Bureau.



## Lobby Craze

**Grade:** High School

**Subject:** Government  
Economics

**Objective:** To educate students about government regulations within the swine industry and to provide them with an opportunity to lobby.

**Standards:** Economics: Applies government policies to business. Understands the role of the consumer.

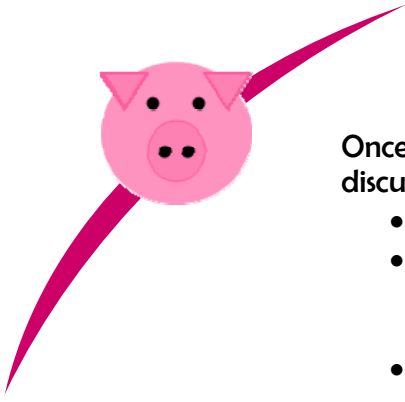
Government: Evaluates the usefulness of various forms of political participation in influencing public policy. Recognizes factors that influence voter's decisions.

**Procedure:** Students will be asked to review Iowa government regulations put forth on the swine industry. After reviewing the different regulations, students will choose one regulation that they see as outrageous or unfit and research the details of that particular regulation.

Some great research starting points include:

- The Coalition to Support Iowa's Farmers  
<http://www.supportiowasfarmers.org/>
- Iowa Department of Natural Resources  
[www.iowadnr.com](http://www.iowadnr.com)
- Iowa Farm Bureau  
[www.ifbf.org](http://www.ifbf.org)
- The Iowa Pork Producer Association:  
[http://www.iowapork.org/rscinfo/resources\\_and\\_info.html](http://www.iowapork.org/rscinfo/resources_and_info.html)
- Iowa Manure Management Action Group:  
<http://extension.agron.iastate.edu/immag/default.htm>
- The National Pork Board:  
[www.pork.org](http://www.pork.org)
- Iowa Pork Industry Center:  
<http://www.ipic.iastate.edu/topics.html#manure>

Following the students' research, they will be asked to lobby (or give a short persuasive speech) on altering the regulation to better suit those affected by the regulation.



Once all of the students have completed their lobby speech, have an open discussion. Questions that can be asked include:

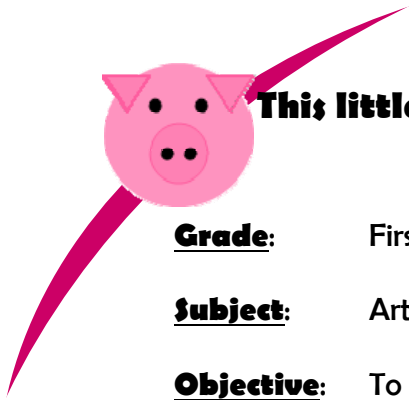
- What do you think about the number of regulations?
- What would your thoughts and opinions be if you wanted to start your own business or come back to your family business and you encountered this many regulations?
- In order to support another person in a family business, some type of growth is often needed. Do you feel growth and development is possible or feasible with these kinds of regulations?
- In other countries, governments have increased regulations to the point where agriculture is being driven out. (You may have heard about dairy farmers moving to Iowa from the Netherlands.) What do you think will happen if agriculture is driven out of the U.S. because of regulations?
  - Where do you think our food will be produced?
  - How do you feel about having other countries being held responsible for the food you eat?
    - Do you think the quality of the food will be the same?
    - Do you think the new source of food will take the same level of food safety precaution during production and harvest?
  - How do you feel about possibly paying higher prices on food because we have to import it from other countries?
- What steps are we going to take as citizens to ensure that our food sources stay within the U.S.?

**Source:**

Tara Gilbert. Iowa Farm Bureau.



**This Little Piggy**  
Cried “Wee! Wee! Wee!”  
all the Way Home



**This little piggy cried “Wee! Wee! Wee!” all the way home.**

**Grade:** First through Fifth Grade

**Subject:** Art, Language Arts, Math

**Objective:** To discover all of the ways co-products of swine get into homes, besides the pork products they eat.

**Standards:** Art: Uses symbolic and visual storytelling. Uses a variety of media to create visual images. Demonstrates craftsmanship.

Language Arts: Follows rules of conversation. Speaks in complete sentences with appropriate voice tone and body posture. Listens for specific information in spoken text.

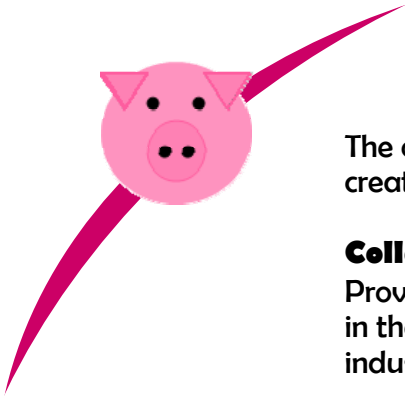
Math: Creates and interprets graphs.

**Procedure:** Display items containing products from the swine industry (co-products from swine) that can be found around the classroom, such as

- Crayons
- Rubber bands
- Glue
- Paint brushes
- Chalk
- Food coloring
- Leather shoes
- Plastic / cellophane wrap
- Makeup

Encourage students to determine what all of these products have in common. After some discussion, reveal that they all contain animal (swine specifically) by-products. Briefly explain how animal products are useful for these products:

- Fatty substances used as binding agents
  - Crayons
  - Rubber bands
  - Chalk
  - Makeup
  - Plastic / cellophane wrap
- Blood used as colorant
  - Food coloring
- Hide
  - Leather shoes
- Hair
  - Paint brushes



The opening activity will give the students ideas of what to look for when creating their collage.

### **Collage**

Provide students with a variety of magazines. Ask students to cut out items in the magazine which they think were made from products in the swine industry and create a collage.

### **Show and Tell**

Have students share their collage, show which items they have included, and explain why they thought swine co-products may have been used.

### **Graph Results**

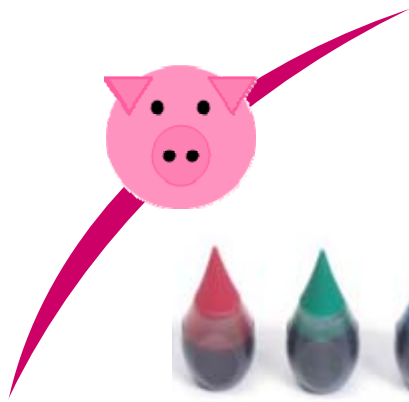
From the show and tell, tally the items students choose to use in their collage and then have students create a graph.

### **Follow up activity**

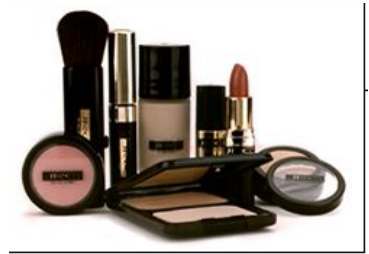
A fun worksheet, "Match the picture to its pig source," has been created to check for retention. This worksheet asks students to match the products which were found in the classroom to the pig source explained by the educator.

**Source:** Tara Gilbert. Iowa Farm Bureau.

Name \_\_\_\_\_



Match the picture to its pig source.



Blood



Hair



Skin

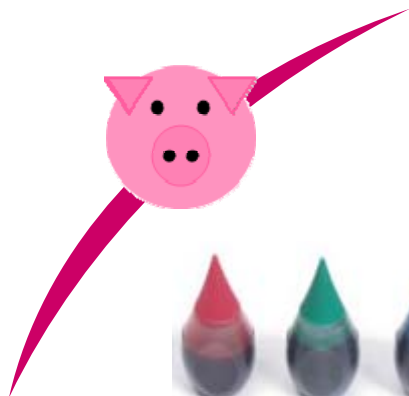


Fat

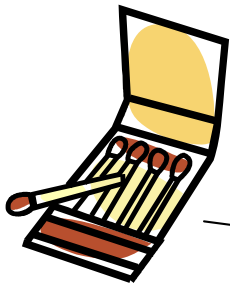
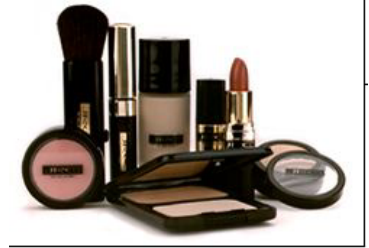


Bones





Match the picture to its pig source.



Blood

Hair

Skin

Fat

Bones



## “Everything but the Oink”

**Grade:** Middle School through High School

**Subject:** Agriculture, Language Arts, Research, Science, Technology

**Objective:** To gain an understanding of the co-products the swine industry provides.

**Standards:** Agriculture: Understands value-added agriculture. Understands consumer dependence on agriculture.

Language Arts: Utilizes print and electronic resources to generate data. Demonstrates proper grammar usage. Organizes information in different ways according to the information, problem or question. Cites research using the MLA guidelines.

Research: Recognizes the difference between relevant and irrelevant web sites.

Science: Demonstrates the relevance of science beyond school walls.

Technology: Communicates information via multi-media.

**Procedure:** Give students 10 seconds to write down all the ways they see swine in a retail setting. Then give the students an additional 10 seconds to complete the same task, but pork products cannot be listed (ground pork, pork chops, ham, bacon, etc.)

Allow the class to form groups of three or four and assign alternating groups with “Pharmaceutical Swine Co-Products” and “Industrial Swine Co-Products.” Each group will research three pharmaceutical products or industrial products which contain swine co-products. In order to prevent duplicate products, student should report back which products they will research.

### **Research**

Students will research their chosen products to determine the following:

- Swine co-product used (heart, hide, hair, etc.)
- Use or purpose of the product (if the use isn't obvious such as leather shoes)
- Types of business and careers involved in producing the product
- Benefit of using swine co-products over other species
- Whether the product is imported into the US, or exported out of the US, or both

A great research starting point is the National Pork Board's Quick Facts book which can be found at:

<http://www.pork.org/NewsAndInformation/QuickFacts/default.html>

### **Oral Presentation**

Students will use their research to develop a PowerPoint presentation which they will present to the class.

**Source:** Tara Gilbert. Iowa Farm Bureau.