



Ohio's Career
Development
Program

The activities in this packet were written by Paulette Howell, Auburn Career Center

The packet was illustrated by Annie King, Ohio Hi-Point Career Development



For additional activities, visit our website at www.ohiociad.com.

Issue 2
2007-2008
Elementary

Goods and Services

Featuring Ohio's Academic Content Standards:
The Entrepreneurial Edge: *Language Arts:* Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies, Grades 4-7 A-D
Writing Applications, Grades 3-4 B
The Science of Making Toothpaste: *Science:* Scientific Inquiry, Grades 3-5 A-C; Scientific Ways of Knowing, Grade 3-5 B, C
A Goods and Services Look Around Town: *Social Studies:* Economics, Grades K-2 B; Grades 3-5 B, C; Social Studies Skills and Methods, Grades 3-5 D
Dream Big: *Social Studies:* Economics, Grades 3-5 B, C

The Entrepreneurial Edge

Based on the book *The Toothpaste Millionaire*

By Jean Merrill



Every entrepreneur has one thing in common: they see a problem and create a solution. In *The Toothpaste Millionaire* sixth grader Rufus Mayflower feels there is a problem with the cost of toothpaste. His solution is a simple and inexpensive one--he makes his own toothpaste. Rufus, with the help of his good friend Kate MacKinstrey set out to change the toothpaste business forever. Read the book and find out how Rufus becomes "The Toothpaste Millionaire".

You be the judge: Does Rufus have what it takes to be an entrepreneur?

Analyze the traits that Rufus possesses with the skills that are needed to be an entrepreneur. Complete the chart below, analyze the results and write a paragraph supporting your conclusion.

Traits of an Entrepreneur	Rating Scale (5 strongly agree—1 strongly disagree) Circle how you think Rufus rates	Justify the Rating
Self-motivated	1 2 3 4 5	
Willing to take risks	1 2 3 4 5	
Enthusiastic about the work	1 2 3 4 5	
Organized	1 2 3 4 5	
Good budgeting and record keeping procedures.	1 2 3 4 5	
Manages time and resources in an orderly manner	1 2 3 4 5	
Willing to market him/herself and the goods and services he/she provides	1 2 3 4 5	

Now it's your turn: Do YOU have what it takes to be an entrepreneur?

Analyze the traits that YOU possess with the skills that are needed to be an entrepreneur. Complete the chart below, analyze the results and write a paragraph supporting your conclusion. Write a second paragraph comparing your results with the results of Rufus.

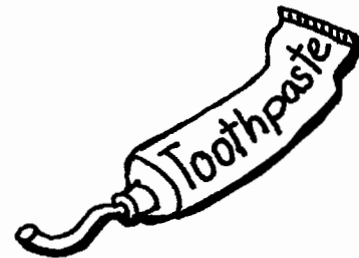
Traits of an Entrepreneur	Rating Scale (5 strongly agree—1 strongly disagree) Circle how you think YOU rate	Justify the Rating
Self-motivated	1 2 3 4 5	
Willing to take risks	1 2 3 4 5	
Enthusiastic about the work	1 2 3 4 5	
Organized	1 2 3 4 5	
Good budgeting and record keeping procedures.	1 2 3 4 5	
Manages time and resources in an orderly manner	1 2 3 4 5	
Willing to market yourself and the goods and services you provide	1 2 3 4 5	

All entrepreneurs have to overcome obstacles. What are some of the obstacles that Rufus and Kate encounter and how did they overcome them?

Even though Kate felt she wasn't good at math, why does she make a good business partner for Rufus?

Imagine that you are Rufus. What would be your next entrepreneurial adventure?

Pretend you are an entrepreneur that has a math problem relating to the making of a good or service. Write out a math story problem to share with your classmates.



Ohio's Academic Content Standards

Language Arts: Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies, Grades 4-7 A-D
Writing Applications, Grades 3-4 B

Economics
Self Awareness



The Science of Making Toothpaste

Activity related to the book *The Toothpaste Millionaire*

By Jean Merrill

“Chemists study the properties of matter. They prepare test solutions to study how chemicals combine. They observe how substances react to heat, light, or other chemicals. They analyze compounds to learn their physical and chemical makeup. Chemists use computers to compile and analyze the results of their research.” *Source: Ohio Career Information System*

Chemists have learned that to make a **solution** it takes at least two ingredients—a **solvent** and a **solute**. An ingredient that dissolves is called a solute. The liquid it dissolves into is called a solvent.

Solvent + Solute = Solution

Now is the time to think like a chemist and develop toothpaste.



Ask a question: What is it that I want to accomplish?

Answer: How to make toothpaste with the ingredients given to you.

Make a guess, called a hypothesis, as to what the answer will be.



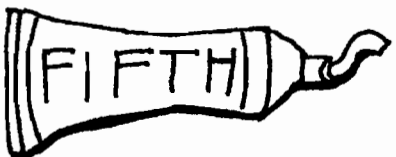
I am guessing that toothpaste is made in the following manner:



Test your guess by experimenting.



Watch everything that happens during your experiment and write down what happens.



Analyze all your data (gathered information) and come to a conclusion. Did your guess solve your original question?

Are you satisfied with your results?

Follow the recipe for toothpaste that is provided to you. Write a compare and contrast summary between your experiment and the recipe that was given to you.

Experiment further with different flavors. Test market your product to see what the most popular flavors are. Graph the results of your test.

When your experiment is complete, answer the following questions:

- What ingredients are the solvents? What ingredients are the solutes?
- How many teaspoons of ingredients did you use to make your toothpaste?
- Do you think your toothpaste has a good flavor?
- How can you improve the taste of your toothpaste?
- Which toothpaste came out better: your group's hypothesis experiment or the recipe?
- Would you like to be a chemist someday? How would you use your chemistry skills to impact a product or procedure?

Extension Activity: Compare your ingredient list to that on a toothpaste tube you have at home. Why do you think there are different ingredients? Perform an Internet search to determine the different ingredients' role in being included in the company's recipe.

Ohio's Academic Content Standards

Science: Scientific Inquiry, Grades 3-5 A-C
Scientific Ways of Knowing, Grade 3-5 B, C

Career Information
Employability Skills



The Science of Making Toothpaste

Teacher Note Page

Making toothpaste is a great way to:

- reinforce the concept of scientific method
- reinforce safety procedures when conducting an experiment
- reinforce measuring skills
- develop teamwork skills by having students in small groups to conduct the experiment
- make connection between science skills learned in school with real-world application

Give each group the following resources:

a plastic bowl of baking soda

a measuring teaspoon

a plastic bowl of salt

an eyedropper or pipette

a plastic bowl of water

small plastic zippered snack bags

food flavoring/extract

small plastic spoons

You may choose to give each group a different flavoring: vanilla, almond, cinnamon, peppermint, spearmint, orange, lemon, root beer, or maple.

Let the students experiment with their hypothesis. Then give the groups the following recipe for toothpaste and have the groups make this toothpaste.

How to Make Toothpaste

What you'll need:

4 teaspoons baking soda

1 teaspoon salt

Drop or two of food flavoring or extract

1 teaspoon water

Measuring teaspoon

Eyedropper or pipette

Zippered snack bag

Small plastic spoon



Measure 4 teaspoons baking soda and about $\frac{1}{2}$ teaspoon water in a zippered snack bag. Stir with a small plastic spoon. Add 1 teaspoon salt and a drop of food flavoring or extract. Stir again. Add more water if needed to make a smoother paste.

A Goods and Services Look Around Town



Within your community you have businesses that provide goods and services. A bakery provides baked goods to its customers. A dentist office provides the service of taking care of customers' teeth. An auto dealership provides goods (cars) and services (upkeep on cars).

Collect pictures of several business areas or strip malls within your community from newspaper ads or

take some photos of your own. In small groups, choose one photo, with each group having a different business. Use the T-chart below to list the businesses and the goods and services they provide. Note: Some businesses provide both goods and services.

GOODS	SERVICES
Business: Goods Provided:	Business: Services Provided:
Business: Goods Provided:	Business: Services Provided:
Business: Goods Provided:	Business: Services Provided:
Business: Goods Provided:	Business: Services Provided:

Do you think the way the businesses look make a difference on profits earned?

What other businesses do you think would be profitable at your picture's location? Why do you think they would do well?

What are some other businesses in your community that compete with the one shown in your picture? How do you think it affects their sales? How do you think it affects their advertising and pricing techniques? Do you think the competition is fair? Does it have a positive or negative impact on the businesses?

What business in the picture would you most like to work at? What skills would you have to develop in order to work there?

With your group, decide on a business you would like to open that doesn't exist in your community. What goods and/or services would your business provide? How would you get new customers to your store?



Ohio's Academic Content Standards
Social Studies: Economics, Grades K-2 B;
Grades 3-5 B, C
Social Studies Skills and Methods, Grades 3-5 D

Economics
Career Information
Self Awareness
Decision Making and Goal Setting

Dream Big

Making a Business-Front Shoe Box

An entrepreneur is someone who takes the risk to develop a new product or provide a new service to consumers. It's fun to dream about starting a business that will provide a good or service to the consumers of your community and beyond.

Develop a business-front shoebox by following the steps below:

Step 1: Think of a business that you would like to start. Ask yourself the following questions:

- What special skills or hobbies do I have that can be used to produce a good or provide a service?
- What goods or services do you think are needed in your community and beyond?
- How much competition would your business have within your community and beyond?
- Do you think that providing this good or service could be profitable?

Step 2: Get a shoebox with a lid.

Step 3: On the bottom of the shoebox design the front of your business building. The front should have the name of your business and some indication of the good or service you provide.



Bottom of shoebox = store front

Step 4: In the inside of the shoebox develop a diorama (a scenic representation in which lifelike details are displayed) that shows the operation of your business.



inside of shoebox = store interior

Step 5: Answer the questions in the boxes on the next page. Cut and glue them to the inside of the shoebox lid.

Does your business provide a good or a service?

What does your business provide to consumers?

What is the name of your business?

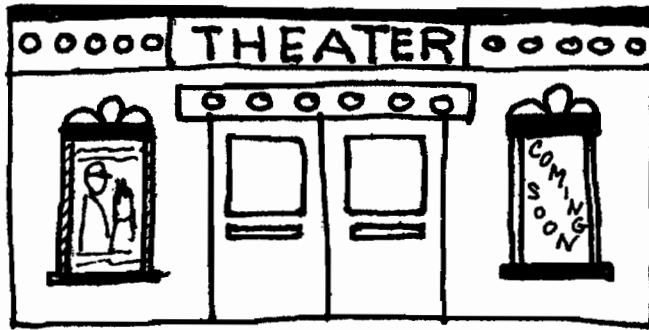
Who would purchase your good or service?

Would your business provide a good or service to just your community or beyond?

How would you get consumers to know about your good or service?

What capital goods (man-made goods that are used to produce a good or provide a service) are needed to produce your good or service?

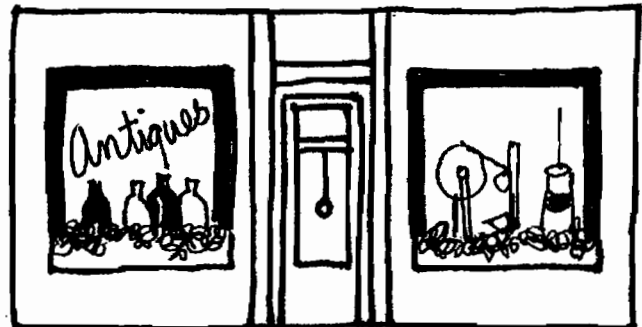
What employability skills do you need to produce your good or provide your service?



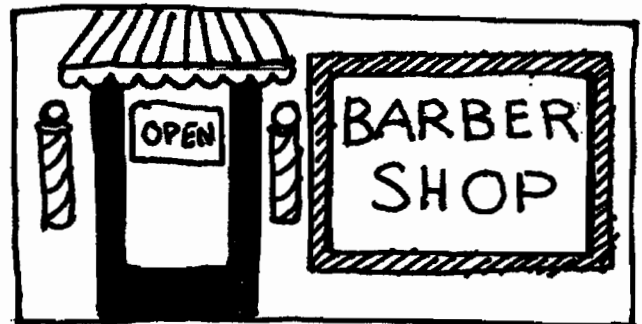
Once all students have completed their shoebox businesses, hold a “community business district tour”. As you walk around the classroom, make notes about which businesses exist in your community. Use the table on the next page to chart the names of the businesses, and the goods/services provided. Then answer the following questions.

How many businesses are represented?

Are there businesses that provide more than one good or service under its roof?



Is there more than one business that specializes in providing the same good or service? If so, how do you think the competition among them will affect your district? Which one of those businesses would you support, and why?



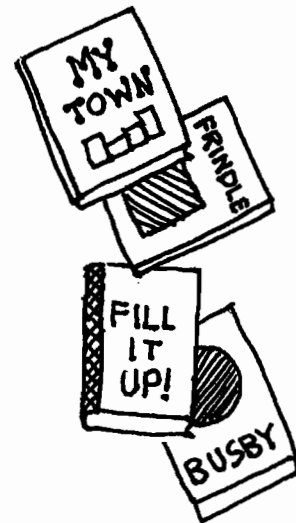
Think about your town, and compare it to the one created in your classroom. Does your class’ business district provide similar goods and services that your community does? Which goods or services are missing, and how would that affect consumers, and the economy of your class community?

Extension Ideas:

- Ask a local entrepreneur to speak to the class about his/her successes, difficulties, challenges, education and training and how he/she developed his/her idea into a business.
- Develop a mock business plan that would be used to secure financial support to start the businesses. The students can research business plans on the Internet.
- Make factors of production (natural resources/land, capital goods, labor and entrepreneurship) charts for the businesses.
- Develop a newspaper advertisement for the business.
- Develop a television advertisement for the business.
- Determine if any of the businesses can provide goods or services for the other businesses.
- Research entrepreneurs and develop an entrepreneurial wall depicting the person and the product or service he/she provided.
- Conduct an on-line scavenger hunt of entrepreneurs who developed various goods and services. Have each student research a different entrepreneur and develop a clue representing the person. Make a list of the clues and have the students find out whom the entrepreneur is. An example can be: Who thought of the idea of having McDonald's restaurants?
(http://www.mcdonalds.com/corp/about/mcd_history_pg1.htm)
- Ask family members what goods and services they used when they were your age. Are these goods and services still available? Have these goods and services been replaced by other goods and services?

Other Books to Read:

Mel's Diner by Marissa Moss
Who Wants a Cheap Rhinoceros? By Shel Silverstein
My Town by William Wegman
Loon Lake Fishing Derby by Kathleen Cook Waldron
Vision of Beauty: The Story of Sarah Breedlove Walker by Kathryn Lasky
What's the Big Idea, Ben Franklin? By Jean Fritz
Arthur's Pet Business by Marc Brown
A Bear for Miguel by Elaine Marie Alphin
Busby by Julia Hoban
The Popcorn Shop by Alice Low
The Wilsons, A House-Painting Team by Alice K. Flanagan
Fill It Up! All about Service Stations by Gail Gibbons
The Berenstein Bears and Mama's New Job by Stan Berenstein
Frindle by Andrew Clements



Ohio's Academic Content Standards
Social Studies: Economics, Grades 3-5 B, C



Community Involvement
Economics
Career Information