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Economics [3rd grade]

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UNDERSTANDING BY DESIGN

Unit Cover Page

Unit Title: Economics

Grade Level: 3rd

Subject/Topic Area(s): Social Studies

Designed By: Jennifer Mahler

Time Frame: 15 30 minute sections

School District: Alamo Heights ISD

School: Woodridge Elementary

School Address and Phone:

Woodridge Elementary 100 Woodridge San Antonio, TX 78209 (210) 826-8021

Brief Summary of Unit

Through various learning activities, this unit will help students understand how both businesses and people come to make decisions about money. Students explore the concepts of scarcity, supply and demand, cost of production, and budgeting money in order to make good choices about how to spend and make money.

In the performance tasks, students will be asked to create their own lunch budget for a week and to create a product to be sold during a "Market Day". The lunch budget assessment will require students to make good choices about how to spend money and will also allow them to see the benefits of saving money. The "Market Day" assessment will allow students to use the concepts of scarcity, supply and demand, cost of production and consumer interests to create a successful business and sell their own product. Both of these tasks will require students to pull together their knowledge from the unit in order to demonstrate it in a unique and creative way.

Unit: Economics

Grade: 3rd

Stage 1: Desired Results

Understandings

Students will understand that...

- People/Businesses use a budget to make decisions about what to buy and how much to spend or save.
- Communities are economically interdependent because of the availability of resources.
- In a free-market economy, businesses are successful by creating prices that are shaped by the availability of resources (supply) and the amount of product that consumers will buy (demand).

Essential Questions

1. How do you decide what to do with the money you have?

- 2. How does the concept of scarcity affect our lives and choices?
- 3. What makes a business successful?

Knowledge & Skill

(NEISD scope & sequence; TEKS; Core; etc.)
3.6 The student understands the purposes of spending and saving money.

- A) identify ways of earning, spending, and saving money; and
- B) analyze a simple budget that allocates money for spending and saving.
- 3.7 The student understands the concept of an economic system
 - A) define and identify examples of scarcity;
 - B) explain the impact of scarcity on the production, distribution, and consumption of goods and services;
 - C) explain the impact of scarcity on interdependence within and among communities; and
 - D) explain the concept of a free market.
- 3.8 The student understands how businesses operate in the U.S. free enterprise system.
 - A) give examples of how a simple business operates;
 - B) explain how supply and demand affect the price of a good or service;
 - C) explain how the cost of production and selling price affect profits, and

Pre-requisite Knowledge:

The student uses place value to represent whole numbers and decimals.

3.1 The student uses place value to communicate about increasingly large whole numbers in verbal and written form, including money.

Stage 2: Assessment Evidence

Performance Task:

- You are given \$25 to buy your lunch for 5 days. Use the given menu to plan out what you will eat each day. You should have at least one drink, one entrée, and one side dish per meal. Desserts and appetizers are extra so you may have to save money one day to purchase these items on another. You should create a lunch calendar showing me what you will eat, the money you will spend, and a running total of how much money you have left at the end of each day. Make sure to include any deliberate savings you have set aside for "extras".
- It's "Market Day"! You are going to use the concepts we have learned to create your own successful business. You will need to purchase materials to create a product that will be sold during "Market Day". You will need to figure out how much money you have spent on materials per unit and price your product accordingly. Remember, you want to make a profit to be successful, so be very careful about your pricing. You will be filling out a before and after reflection sheet about your business. Some of the things you will need to be thinking about include your reason(s) for choosing your product (these should come from the interview we do with your consumers), your costs, your sales, your profit, and how the concepts of supply and demand and scarcity affected your pricing. (All of these things will need to be included either on the before or after "Market Day" plan).

Other evidence:

- Informal assessment of "Sea World" Activity
- Reflection and discussion of scarcity
- Cost exit question
- Unit price/cost of production handout

Stage 3: Learning Activities

Day 1: Before this day, have students discuss with their parents different ways that adults and kids can earn money. When students come to school do a chalk talk on "Ways to Earn Money". Have students work together to brainstorm all of the ways that they know of to earn money. (Students may give answers like "jobs, allowance, washing dishes, selling lemonade, selling things, making good grades etc.") Put students into groups and have them try to sort these ideas into categories of ways to earn money. (Some ideas may be jobs, chores, sales, etc.)

Day 2: Introduce the first essential question: "How do you decide what to do with the money you have?" Talk with students about how money can be used once it is earned. Discuss the differences between saving and spending money. Ask some of these questions to guide discussion: "Why do people spend money? Why do people save money? On what kinds of things would you spend money? What might you save money for?" Students should take home the "Spending vs. Saving" sheet to interview their parents using similar questions.

Day 3: Revisit student vs. parent answers about spending and saving money. Discuss any similarities or differences between the two approaches for what to do with money (you may want to do a whole class Venn Diagram). Introduce the idea of a budget by discussing and beginning the "Going to Sea World" activity. (Note: you need to gather menus and souvenir lists from Sea World or any other theme park before doing this activity).

Day 4: Continue the "Going to Sea World" activity with students and discuss the budget that the class created.

Day 5: Hand out the checklist and instructions for the 1st performance task <u>"My Weekly Lunch Budget".</u> Have students complete the assessment.

Day 6: Introduce the concept of scarcity by putting students into groups to complete the "Scarcity Activity". Display the second essential question: "How does the concept of scarcity affect our lives and choices?" Use the following questions for discussion/reflection (these will also help students have a better understanding of the essential question): "What happened when you needed something that you didn't have? Which 'communities' seemed more willing to share their resources? Which of the resources seemed to be the scarcest? Did having a scarce resource affect how you chose to share? What would have happened if communities were not willing to share their resources? Can you think of any examples where a resource may be scarce? Does being scarce make a resource more valuable? Can a resource be scarce at the global level? What might that do to the price?" Introduce the term "interdependence".

Day 7: Create a class list of questions concerning how scarcity and interdependence influence the pricing decisions in the store. Have a person from a local grocery store come in to talk with students about where certain produce comes from and how that affects the pricing of those items.

Day 8: Introduce the third essential question "What makes a business successful?" To introduce supply and demand, start the class by passing out different amounts of money to students (fake \$ of course). Set out six pairs of scissors and explain that the next task we will do involves cutting out three shapes (this can vary). The only problem is that we can only use these six pairs of scissors. (You may want to offer some hypothetical incentive that will be given to the first 6 people to neatly finish the task to motivate students to bid for the scissors). Draw a graph on the board to track with students the price at which you will sell the scissors. Ask students "Who would be willing to buy one of these pairs of scissors for up to 15 cents?" (Many students should raise their hand at this price). Continue to raise the price until you reach the maximum amount of money that you gave to any one particular student. Use the terms "supply" and "demand" when talking during this activity. Discuss these questions "At what price did I sell the least number of scissors? At what price did I sell the most number of scissors? Did I ever find a price that would sell exactly the number of scissors I had? What was my supply of scissors? Was my demand more than the supply? How did that affect the cost? How are supply and demand related? How does this activity help me decide what price to sell my scissors at so that I can make the most profit? Pass out the exit question, "Name two things a business considers when figuring out how to price their product."

Day 9: To introduce unit price and further discuss cost of production bring in several items to make a craft with the students. For example, bring in cotton balls, "googly" eyes, and feet to make a creature to sell. Give students the "Cost of Production" sheet and a calculator. Remind students that cost of production is how much money you had to spend to make your product. Show students how to figure out the cost of production by finding out the unit price of each item you choose to use. As a whole class figure out the cost of production for our "cotton ball man" and discuss the implications for pricing.

Day 10: Let students practice figuring out unit price using different raw materials. Make sure to give students the price of the raw materials and a calculator to help them figure out the unit price of your products. Have students include a reasonable retail price for the products.

Day 11: Introduce the second performance task "Market Day". Go over the rubric with students. As a class develop a questionnaire to be given to your "consumers" (which should be another classroom, perhaps the 2nd graders) to gather data on what types of items they would most likely purchase. (Some questions may be, "What is a favorite TV show? Sports team? How many students like things that make noise?, etc.) Also, have students decide on a charity organization that they would like to donate their profits to.

Day 12: Have students spend some time interviewing their consumers using the class created questionnaire. (Try to make this questionnaire go home on a Thursday or Friday so that students may have the weekend to purchase any materials they need for their product) You may actually want to introduce this questionnaire earlier in the unit.

- **Day 13:** Have students bring in their materials and begin creating their products.
- Day 14: Continue working on student products. Make sure that students finish their "Before Market Day" Plan.
- **Day 15:** "Market Day"! Let students sell their products. Students may adjust pricing anytime throughout the shopping. When students have finished give them their "After Market Day" Reflection".

Mahler's Menu

Appetizers:	
Chips and Salsa	\$1.00
Cheese Sticks	
Nachos	
Celery with Peanut Butter	
Entrées:	
Chicken Fingers	\$2.50
Personal Size Cheese Pizza	
Hamburger	-
Cheeseburger	
Grilled Cheese Sandwich	
Sides:	
French Fries	\$.75
Onion Rings	
Macaroni and Cheese	
Apple Slices	
Garden Salad	
Desserts:	
Ice Cream (one scoop)	\$1.50
Fruit Salad	
Chocolate Sundae	
Slice of Pie (apple, lemon, strawberry)	
Drinks:	
Iced Tea	\$.75
Milk	
Juice (apple, orange, fruit punch)	•
Soda	

Name:			

My Weekly Lunch Budget

You are given \$25 to buy your lunch for 5 days. Use the given menu to plan out your budget. You should have at least one drink, one entrée, and one side dish per meal. Desserts and appetizers are extra so you may have to save money one day to purchase these items on another.

You should create a lunch calendar showing me what you will eat, the money you will spend, and a running total of how much money you have left at the end of each day. When you have figured out what you will eat for the week, complete the reflection questions.

	Monday	Tuesday	Wednesday	Thursday	Friday
Entrée					
Side					
Drink					
Appetizer (optional)					
Dessert (optional)					
Total Spent					
Amount Remaining					

Name:

Reflection Questions



1.	How did	you decide	how you woul	d spend	l your money?
----	---------	------------	--------------	---------	---------------

2. Were you able to get everything that you wanted every day? Explain.

3. Did you budget for appetizers or desserts? If you did include them in your budget, how were you able to afford them?

4. What did you learn from this activity that may help you make choices about budgeting your own money?

Lunch Budget Rubric

	Unacceptable	Approaching	Meeting
Math computation	I made several	Most of my	All of my
	computation mistakes	computations (adding	computations (adding
	that affected my	and subtracting) were	and subtracting) were
	budget.	correct in my budget.	correct in my budget.
Budget	I did not make choices		All of my choices
	that showed I thought		showed that I really
	about how to budget		thought about how to
	my money, or I		budget my \$25.
	overspent.		
Chart	I made several	My lunch calendar	My lunch calendar
	mistakes filling out	chart is complete, but	chart is complete and
	my chart or any	I have made a few	accurate.
	portion of it is	minor mistakes.	
	missing.		
Reflection Questions	I did not answer or	I thoughtfully	My teacher can really
	briefly answered the	answered many of the	see that I understand
	questions on the	questions, but I was	how to create a budget
	reflection.	very brief on a few of	because my answers
		them.	are thoroughly and
			thoughtfully
			answered.

Name:	
-------	--

Spending vs. Saving





For our economics unit, students are gaining a better understanding of the choices a person makes when thinking about what to do with their money. As a class, we have answered the following questions (from a student's point of view). Students are now supposed to use these questions to interview an adult so that tomorrow we can compare the two perspectives. Thank you for helping!

1. Why and on what kinds of things do people spend money?

2. Why and on what kinds of things do people save money?

Mamai		
Name:		



A Trip to Sea World!

When people go on a trip, they often have to budget for their expenses. We

will practice creating a budget by pretending that our class will be going to Sea World. We will break into groups in order to figure out how much money we will need to budget for each aspect of the trip.
Transportation:
Entrance to the park:
Food and drinks:
Souvenirs:

Scarcity Activity

Community #1

Basic Needs:

- Shelter
- Water
- Food

To meet your basic needs, your community needs to create a shelter and gather food. Because of scarcity, you will not have enough resources to meet your needs on your own. You will need to figure out which other communities will be willing to share their resources with you so that you can create the following:

Shelter (create a house)

- 1 4inch by 3 inch rectangle of yellow paper (for the bottom of your house)
- 1 purple triangle (to represent the roof)

Food and water (create a chain)

- 1 strip of blue paper (water)
- 1 strip of red paper (meat)
- 1 strip of green paper (vegetables)

Your groups has:

- 4 purple triangles
- 1 stapler
- 1 strip of blue paper



Community #2:

Basic Needs:

- Shelter
- Water
- Food

To meet your basic needs, your community needs to create a shelter and gather food. Because of scarcity, you will not have enough resources to meet your needs on your own. You will need to figure out which other communities will be willing to share their resources with you so that you can create the following:

Shelter (create a house)

- 1 4inch by 3 inch rectangle of yellow paper (for the bottom of your house)
- 1 purple triangle (to represent the roof)

Food and water (create a chain)

- 1 strip of blue paper (water)
- 1 strip of red paper (meat)
- 1 strip of green paper (vegetables)

Your group has:

- 4 strips of green paper
- 1 strips of red paper
- 3 strips of blue paper
- 24 inch by 3 inch rectangles of yellow paper



Community #3:

Basic Needs:

- Shelter
- Water
- Food

To meet your basic needs, your community needs to create a shelter and gather food. Because of scarcity, you will not have enough resources to meet your needs on your own. You will need to figure out which other communities will be willing to share their resources with you so that you can create the following:

Shelter (create a house)

- 1 4inch by 3 inch square of yellow paper (for the bottom of your house)
- 1 purple triangle (to represent the roof)

Food and water (create a chain)

- 1 strip of blue paper (water)
- 1 strip of red paper (meat)
- 1 strip of green paper (vegetables)

Your group has:

- 24 inch by 3 inch rectangles of yellow paper
- 1 glue stick
- 3 strips of red paper



Community #4:

Basic Needs:

- Shelter
- Water
- Food

To meet your basic needs, your community needs to create a shelter and gather food. Because of scarcity, you will not have enough resources to meet your needs on your own. You will need to figure out which other communities will be willing to share their resources with you so that you can create the following:

Shelter (create a house)

- 1 4inch by 3 inch square of yellow paper (for the bottom of your house)
- 1 purple triangle (to represent the roof)

Food and water (create a chain)

- 1 strip of blue paper (water)
- 1 strip of red paper (meat)
- 1 strip of green paper (vegetables)

Your group has:

- 4 strips of blue paper
- 1 purple triangle
- 3 strips of green paper

once?

Scarcity Activity Reflection Sheet



1. What happened when you needed something you didn't have?
2. Which communities seemed more willing to share their resources?
3. Which of the resources seemed to be the scarcest?
4. Did having a scarce resource affect how you chose to share? Why or why not?
5. What would have happened if communities were not willing to share their resources?
6. Does being scarce make a resource more valuable? Why or why not?
7. Would you do anything differently now that you have been through the activity

Unit Price/Cost of Production

Many things come in packages (cotton balls, Q-tips, Popsicle sticks, etc.). Usually, a store will sell you these products as an entire package, but have you ever wondered how much an individual cotton ball or Q-tip might cost? If you have, this is called the "unit price". When we create a new product, it is important to find out the cost of all of the resources we used to make it. In order to do this, you will have to know how to figure out the unit price of your raw materials. To figure out the unit price you must use the following number sentence:

Total cost of the package ÷ the number of items in the package = the unit price

LET'S PRACTICE:

	Cost of the package	Number of items in the package	Unit Price
Cotton balls			
"googly eyes"			
feet			

Now that we have our unit prices, we need to add together the separate materials to figure out how much we actually spent to make our product (the cost of production).

Cost	of	Production:	
	•,		

How does knowing this help us set a selling price for our product?

Name:		_			
More P	ractice with Ui	nit Price/Cost of Pr	oduction		
Remember: the numb	per sentence for f	iguring out unit price is.			
Total cost of the package ÷ the number of items in the package = the unit price					
	Cost of the package	Number of items in the package	Unit Price		

Now choose three of these items to create something.

What was the cost of production for your product?

What might be a reasonable selling price for your product?

Name:
Before Market Day
1. What is your product?
2. How did you choose which product to create? (What affected your decision?)
3. What raw materials did you need to use?
4. What was the cost of production of your product?
5. How much money are you going to sell your product for? List 2-3 reasons that describe how/why you chose this price?
6. Estimate your profit: What must happen for you to make this profit?

Name:	 		

After Market Day Reflection



1	Did.	vour	product	Sella	W/hv	٥r	why	not?
Ι.	Dia	youi	product	36115	VVILY	OI.	VVIIV	11015

2. Did supply and demand affect the price of your product?

3. Did your price ever change? If it did, why?

4. If you had to do this project over, what changes might you make?

5. Was your business successful? Why or why not?

Market Day Rubric

	Unacceptable	Approaching	Meeting	Exceeding
Choosing your product (20 percent)	I did not listen to my consumers when choosing my product.	I listened to my consumers, but was only able to use 1 part from the survey to create my product.	I listened to my consumers and used at least two things from the survey to create a product that met their expectations.	I listened to my consumers and used several parts of the survey to create a product that met their expectations.
Pricing your product (40 percent)	I did not think about any concepts we have learned when I chose the price for my product.	I only used one of the pricing concepts we have discussed. (Supply and demand, cost of production, or scarcity).	I thoughtfully used the concepts of supply and demand and cost of production to appropriately price my product.	I thoughtfully used the concepts of supply and demand, cost of production, and scarcity to price my product. I also changed the price of my product when I needed to.
Reflection Pieces (40 percent)	I did not answer the reflection questionsOR- I was not very thoughtful when I answered the questions.	Many of my responses were thoughtful and thorough, but there were a few questions that I only briefly answered and could have incorporated more of the concepts we have been learning about.	I thoughtfully answered all of the reflection questions, but could have been more thorough on some of them. I did use many of the concepts we have learned about to answer my questions.	I thoughtfully evaluated my process and was honest about my business experience. I thoroughly answered each question using all of the concepts we have learned about.