

Pricing

Lesson Description:

In this lesson, students learn how businesses price the items that they sell, and how businesses must match the price of their products to their customers' demands and their own costs. They complete a simple pricing scenario for a business, as well.

Suggested Grade Level:

 $1^{st} - 3^{rd}$

Economic Concepts:

Price

Supply

Demand

Voluntary National Content Standards in Economics:

Content Standard 1: Scarcity

Students will understand that productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

Content Standard 2: Decision Making

Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Many choices involve doing a little more or a little less of something: few choices are "all or nothing" decisions.

Content Standard 7: Markets and Prices

A market exists when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

Content Standard 8: Role of Prices

Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

National Standards for Financial Literacy:

Standard II: Buying Goods and Services

People cannot buy or make all the goods and services they want; as a result, people choose to buy some goods and services and not buy others. People can improve their economic well-being by making informed spending decisions, which entails collecting information, planning, and budgeting.

Jump Start National Standards in K-12 Personal Finance Education

Financial Decision Making:

- -Standard 1: Recognize the responsibilities associated with personal financial decisions.
- -Standard 4: Make criterion-based financial decisions by systematically considering alternatives and consequences.

Time Suggested:

45-60 minutes (if completed in a single teaching period)

Supplies:

- Scarcity Cat Learns to Price Just Right video, and means to project it
- Price, Price, Price It Right PowerPoint presentation, and means to project it
- One copy of the Deciding the Price worksheet, and a writing utensil, per student
- Small piece of paper or sticky note, per student, for the lesson assessment

Classroom Procedures:

- 1. Begin the lesson by showing students the *Scarcity Cat Learns to Price Just Right* video in its entirety. Ask students to pay attention to the decisions Scarcity Cat has to make to run her business.
- 2. After watching the video, lead students in reviewing the pricing strategies that Scarcity Cat and Megan discussed. If students have trouble recalling the details of each situation, review the video using the timestamps indicated. Use the Pricing Scenarios PowerPoint presentation to guide the discussion:
 - a. In the first scenario (beginning at 2:45), Scarcity Cat worries that her competitor, Cheese Mart, has dropped its prices and will steal her customers. In response, she decides to drop her prices as well. The following questions also appear on Slide 2:
 - i. "What does Megan think about Scarcity Cat's plan to lower her price for Limburger to one penny per pound?" (She seems skeptical, and says that she thinks the price is a little low.)
 - ii. "What do the rats think about this plan?" (They giggle and laugh, so it seems like they do not think too much of it.)
 - iii. Megan then helps Scarcity Cat imagine what would happen if she were to sell the cheese that cheaply. Ask, "what happens when the skunks arrive?" (Because the price is so low, the skunks stampede into the store and consume all the cheese very quickly. One skunk who arrives later is not able to buy any cheese, since it is already gone.)
 - iv. Extend the conversation by asking students what they think this low price would mean for Scarcity Cat's future income. "Would Scarcity Cat be able to keep her business open if she sold the Limburger at this low price?" (No. The price is so low that it does not cover her costs to get the cheese to the store, nor does it leave her any profit. The store could not continue to exist at this price.)
 - b. The second pricing scenario (beginning at 4:06) shows Scarcity Cat reacting to the results of underpricing her cheese by overpricing it instead. She tells Megan she will charge one million dollars per pound of cheese. Use these questions (also found on Slide 3) to guide discussion:
 - i. Ask, "what did Megan think of this pricing decision?" (Megan scoffs and her tone implies that she does not think it will work well.)
 - ii. Follow up by asking for the rats' reaction: "what do the rats think of this plan?" (Once again, they laugh wildly.)
 - iii. Review the results of this pricing strategy when the skunks arrive. Ask students to describe the skunks' reaction to the new price. (They once again race into the store, but this time they stop, see the extraordinarily high price, react in shock, and turn around and leave.)
 - iv. Since the skunks left the store quickly, and without buying any cheese, ask students to predict what this pricing strategy would do for the future of Scarcity Cat's business: "What would happen to Scarcity Cat's store if she

continued charging a million dollars per pound for Limburger?" (Since the skunks cannot pay the price Scarcity Cat is charging for the cheese, they will quit shopping there. Without customers, she does not have any way to make an income, and she will eventually have to close her store.)

- c. Scarcity Cat's third and final pricing scenario (shown beginning at 4:59) gives a basic understanding of how business owners price their products. They consider their costs and their desired profit in order to determine the appropriate price. In addition, they try to balance their product supply with the demand they expect that their customers will have for it. Scarcity Cat adds the cost of getting the Limburger to her store (\$3) to the profit she would like to make (\$4) to set the price she will charge her customers (\$7 per pound.) Help students see how this strategy pays off for Scarcity Cat's business using the following questions (also found on Slide 4).
 - i. Ask, "what did Megan think of this plan?" (She thinks it makes sense, so she encourages Scarcity Cat to use that price.)
 - ii. Ask, "what did the rats think of this plan?" (They cheered for the pricing strategy, but seemed concerned when Scarcity Cat pointed out that she would make enough money to buy rat traps.)
 - iii. Continue by asking, "how did the skunks react to this price?" (They came to the store to shop. There seemed to be enough cheese supply to meet their demand. Also, one skunk wanted another cheese product, which made it seem like she is a dedicated customer who thinks the store's prices are reasonable.)
 - iv. Discuss students' thoughts about this pricing strategy and what it means for Scarcity Cat's store: "what will happen to Scarcity Cat's business if she prices the cheese this way?" (Because her customers seem happy, it is likely that the store will stay open and Scarcity Cat will make a profit. Also, the customers have asked for Roquefort, a new type of cheese, which means that her business has the potential to grow.)
- d. Finally, guide students in understanding that Scarcity Cat's final pricing strategy most accurately mimics the way that businesses actually price their items. The simple equation on Slides 6 and 7 shows the basic concept: business owners determine their product cost, add their desired profit, and determine the price that customers will pay. While this is an oversimplified explanation, it helps students see that business owners have to guarantee an adequate supply of their product to meet customers' demands AND earn enough money to keep their businesses running.
- 3. In the video, Scarcity Cat briefly mentions her costs. The following activity helps students think about the costs incurred by business owners, and shows how those costs must be covered by product prices in order for businesses to succeed.
- 4. To begin, select a business to use as the example for the activity. The questions that follow are based around a candy store similar to the one seen in previous \$martPath

videos – but use your discretion and pick a business that is relatable to your students. The basic format remains the same, regardless of the type of business.

- 5. Use Slide 5 to begin.
 - a. Ask, "how did Scarcity Cat determine that \$7/lb. was the best price for her Limburger?" (She figured out how much the cheese cost her. She knew that she needed to make a profit, and not just charge customers her exact cost, so she added to the price so that she could earn a profit. In the end, she decided that \$7/lb. would mean that customers could buy her cheese, but that the profit would be enough to allow her to make money.)
 - b. Show Slide 6, reviewing the idea that price is determined by costs and profit, and then Slide 7, to summarize Scarcity Cat's decision-making process.
 - c. Tell students that they will use these same ideas to help determine how a business like Pitot's Candy Shoppe decides the prices of its items. Rather than pricing an individual item, like a pound of Limburger cheese, the class will think about the different costs a business has to consider when pricing, and the ways that a business might determine its profit.
- 6. Give each student a copy of the Deciding the Price worksheet. (Note that two worksheets are provided at the end of this document. One uses Pitot's Candy Shoppe, as seen in \$martPath's Kevin Becomes Famous and Good Boy Gets His Name videos, as the sample business. The other is blank, and the class will need to decide upon or be assigned the type of business to use for the activity.)
- 7. Point out to students, if they do not notice independently, that the equation found on their worksheet is the same as the equation used to talk about Scarcity Cat's profit. Explain that they will use this equation to think about Pitot Candy Shoppe's prices.
- 8. Project the image of the Pitot's Candy Shoppe found on Slide 8. Give students a minute to observe the store and its contents. If students have not watched the related lesson videos previously, explain that the store sells candy and other sweet treats, and is run by Timmy and Tammy, the puppets in the video.
- 9. Discuss the costs that Pitot's Candy Shoppe incurs in running its business:
 - a. Ask, "What bills do you think the candy shoppe owners have to pay?" (Depending on students' familiarity with utilities, they may start by mentioning basic things like electricity, water, rent/mortgage, and even garbage service.) If students are stumped, redirect their attention to the image and ask the class to consider whether the store is dark, or well-lit: "what will the owners need to pay for to keep the lights on?" (Electricity.) Point out additional bills like water, telephone/Internet, etc., in a similar way if students do not generate those responses on their own.
 - b. Tell students to record those items on their worksheets. If needed, project the worksheet and model its completion for the class.
 - c. Continue by asking the class to think about the cost of the items for sale. "What costs do the owners have when thinking about the items they are selling in the candy store?" (They have to buy the candy itself, and pay to have it shipped to the store. Savvy students might point out that some candy, in particular, will

- be prone to melting, so it will have to be shipped with special care and possibly even refrigeration. This will add to the cost.) Ask students to think about other objects in the store that create costs for the owners. Again, redirect their attention to the image of the store, if needed. (Packaging materials, display items, the cash register, the counter, decorations, etc.) Make sure students are recording their responses on the worksheet.
- d. Move forward by asking students to also consider the services needed to run a store. Point out that some of the initial utility costs and bills that were mentioned are services, but also ask, "what other services are necessary to keep the store running?" (Cleaning, pest control, advertising, accounting/bookkeeping, etc. Some students will have more familiarity with these sorts of services than others. Nudge students with suggestions if they struggle to come up with anything.) Again, have students record their responses on their worksheets.
- e. Lastly, address the issue of employees. Some businesses are run entirely by the owner and his/her family, while many employ other people. If employing other people, then those people expect to be paid for the time that they work. Some students may have family members or friends who work in stores, and will be able to make a meaningful connection to this idea. Once you have discussed this a bit, ask, "what expenses do businesses have to pay for their employees?" (Most importantly, businesses pay wages, or the money earned for doing a job.) Some businesses also give other benefits to their employees, such as insurance coverage, purchase discounts, paid vacation, etc. At this age, it is enough just to mention these ideas to students, and say that businesses must consider their employees' pay and benefits as a cost. Students should record these final costs on their worksheets.
- f. Obviously, this could go on for quite a while. Use students' engagement to determine how long you want the discussion to last. The important goal here is to let students think about the many, many costs involved in running a store rather than creating a truly exhaustive list.
- 10. Next, move on to discussing the store's need for a profit. Again, students at this age need to know simply that stores must do more than pay back the costs they incur to acquire items to sell and stay open. Their owners expect to make a profit. Share with the class that many businesses do not earn a profit instantly, and some go through periods of profitability followed by times when they are not profitable.
 - a. Ask the class to brainstorm things that a business owner would do with profits s/he makes. "Why is making a profit important?" (The business owner needs to pay for his/her own personal expenses a place to live, food to eat, transportation, clothing, healthcare expenses, etc. Without making a profit, s/he will not be able to handle his/her personal expenses, even if the prices charged in the store are covering the business's expenses.)
 - b. Ask the class to recall why the business cannot just charge a random, high price to ensure that all costs are covered personal and business. "Why can't the owner pick a high price for the items sold in the store?" (Customers will not

- necessarily pay a high price. They usually have other options for obtaining the same items, and they have no reason to spend far more than they feel an item is worth.)
- c. Bring students back to Timmy and Tammy and their candy store. What will they need to consider when they decide on the profit they need to make on their items? (Basic living expenses, plus enough extra money to save for slower business periods and unexpected expenses.) Have students record a basic summary of this idea in the "profit" section of their worksheets.

Closing:

Have students think about a succinct way to describe the price of items in the candy store. Reiterate that prices cannot be higher than customers will pay, lower than will cover costs, or picked at random. Focus on the basic equation, if needed, to help students think through their description of what the candy shoppe's pricing strategy should be. Have students write these thoughts in the "price" section of their worksheets.

Assessment:

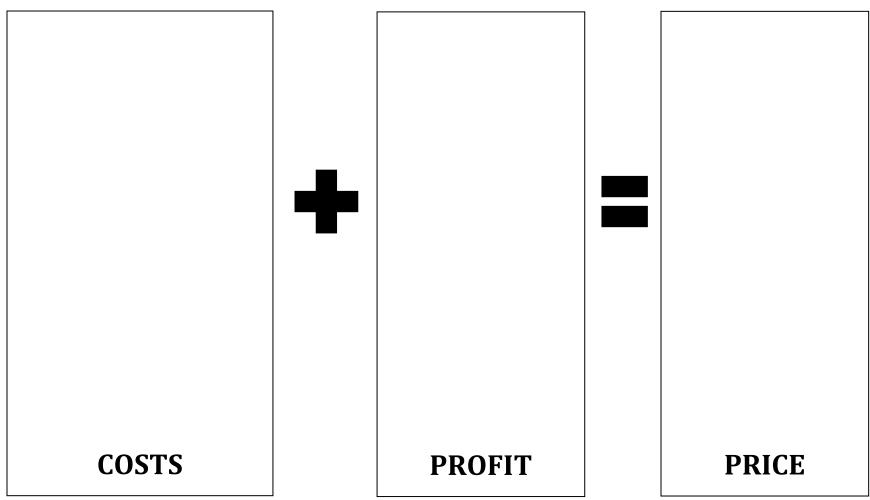
Display Slide 9, which asks students to complete three sentence starters about pricing. Students can write their answers on small slips of paper or sticky notes, and turn them in for a quick assessment of their comprehension. The class can also complete the sentences as part of a discussion for a more formative check. Note that the slide contains a word bank at the bottom. This can be deleted if desired, especially for older students.

Extensions:

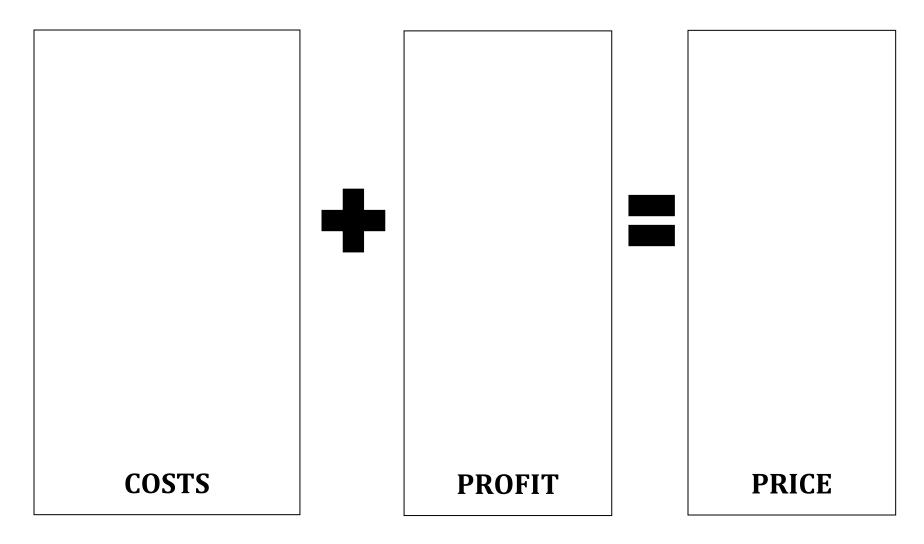
- -Most students will be unfamiliar with Limburger cheese. For fun, watch this short video talking about it and its production: https://www.nbc15.com/content/news/The-legend-of-Limburger-known-as-the-worlds-stinkiest-cheese-510327271.html. (As always, preview videos before watching with students.)
- <u>Prices, Prices: Why They Go Up and Down</u>, by David Adler, discusses price fluctuations, and how producers decide what to produce. There is a discussion of supply and demand, as well as all the factors that a business must consider when pricing. This book is a good resource to reinforce the lesson material.



DECIDING THE PRICE



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Scarcity Cat Learns to Price Just Right – Lesson 1: Pricing