
Principles of Economics || Elasticity: We Can Bounce Back

Goals & Objectives

- Students will solve mathematical problems and then graph the information.
- Students will be able to discuss, in pairs/groups/as a class, how the government handles market failures.

California State Content Standards

- 12.1.1. Students understand common economic terms and concepts and economic reasoning.
- 12.1.2. Explain opportunity cost and marginal benefit and marginal cost.
- 12.1.3. Identify difference between monetary and non-monetary incentives and how changes in incentives can cause change in behavior.

Common Core Literacy Standards

CCSS.ELA-Literacy.RH.11-12.10

By the end of grade 12th, read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently.

CCSS.ELA-Literacy.RI.11-12.4

Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text.

CCSS.ELA-Literacy.W.11-12.10

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Driving Historical Question

When the economy changes, how do consumers alter their purchases?

Lesson Introduction (Anticipatory Set) ||

When students walk in they will see an empty pizza box, an empty gas tank, an empty cup of Starbucks, an empty shoebox, and a candy bar. Students can relate to these items because they likely have purchased them in the past. As they take their seats they will be instructed to look at the "approximate prices" listed on the board and be asked to consider how much they would pay for "one more" of each of the items. There will be a graph with various prices that the students can make a tally to represent the price they are willing to pay for "one more". After they have all taken their seats the teacher will point out the differences between the additional price paid for the necessities, and the additional price paid for the luxury items. This will introduce them to the concept of paying more for an additional item that they need versus for an additional item that they want.

Vocabulary (Content Language Development) ||

Students will be introduced to vocabulary prior to actual content delivery. The teacher will define a second time prior to the reading. S/he will also define as the read is in progress. Students will be required to academically use these terms as they both read and write.

- Elasticity
- Elasticity of Demand
- Inelastic
- Elastic

Content Delivery (Method of Instruction) ||

After the anticipatory activity, the teacher will direct the students' attention to the learning objectives, and the vocabulary written on the board. The teacher will then use the presentation system Prezi to introduce the lecture portion of the lesson. Slides 2-4 will visual demonstrate the difference between needs and wants. This portion does not incorporate the guided notes but connects the graph based anticipatory activity with visuals. Slide 5 & 6 is where the guided notes begin. In slide 5, students are once again, exposed to the vocabulary. The words/definitions/single word fill-ins that are found in the guided notes will be demarcated by red font. Next, the vocabulary will be explained in further detail. Once again the portion that included guided notes will be written in red font.

A video (stopped before its conclusion) will be presented. This portion of the lecture will not require notes, as visual and auditory learners will be given an opportunity to absorb the information without having to write notes.

The following activity will include a hands on lesson using rubber bands. The thicker rubber bands will represent the necessities (i.e. milk, bread and gas), whereas the thinner, more flexible rubber bands will represent luxury items. The students will be required to write the necessity items on the thicker rubber bands and then stretch them. They will be asked to discuss, with a partner, why they chose the items they wrote on the thicker bands. They will be instructed NOT to shoot these rubber bands and will also be told which represents elasticity and inelasticity and why.

Cartoons are then incorporated on the next two slides and work before the introduction of the critical thinking question on slides 11 & 12. The question relates to Hurricane Katrina demonstrates the concept of inelasticity. It shows that people who experience natural disaster will still attempt to buy the basic needs while forgoing the luxury items. Students will numerically see the price changes, and see a first hand account of how it affected people. This incorporates both evidence and empathy.

Next students will be asked to consider current events and speculate how prices would change, how this would effect people, and how their purchasing decisions would change. They will be able to write about the concept of elasticity and how it has changed very little over the years. This critical thinking Quick Write will be included on their guided notes.

Finally, students will be taught how to find elasticity in all items. The teacher will demonstrate, on the front board, how to calculate elasticity. They will only be required to watch, so as to visually absorb the information (I Do). Next, students will be walked through an example found on their guided notes. The teacher will ask students (who can reference the previous example) to tell her what step comes next (We Do). This will work as a formative

assessment. Students will then conduct this procedure on their own with the last question of their guided notes (You Do).

During this time the teacher will conduct a walk around to help students and to conduct a formative assessment. Before this segment, students will be given a "Cheat Sheet," as a guide and further cement the information. This "Cheat Sheet" can be used on their homework that will connect their previously obtained knowledge of graphing with earlier content.

Student Engagement (Critical Thinking & Student Activities) ||

Students will actively participate in a classroom activity. They will consider items they use in their everyday life and think about needs versus wants. They will be able to physically see the items. They will be able to present their own opinions quickly and therefore feel more involved in the activity.

Next, they will be introduced to the vocabulary and goals so as to have expectations of what they will be learning. Students will then visually engage in the concept of elasticity. Guided notes do not include a lot of writing. This will allow the students to focus on the topic being presented. Students will also engage in a hands-on activity that includes rubber bands. This will help them visualize how certain items are more elastic than others.

Students will also consider aspects of Hurricane Katrina, and watch a video. This will allow them to understand and critically think about the mindset of people who experience the weight of purchasing inelastic items during a time of natural disaster.

Finally, students will apply these concepts through math. The students will receive a homework assignment that gives them an opportunity to apply previous graphing skills with the new concepts of externality.

Lesson Closure ||

Students will end with an activity that requires them to take content and to determine elasticity using various charts. They begin working on their homework, which will be a formal assessment until a few minutes before the bell rings. A few minutes before the bell rings the teacher will readdress the goals and objectives, discuss the activities completed and concepts learned, and revisit vocabulary. Students will have a clear idea of their homework, and what they learned throughout the period.

Assessments (Formative & Summative)

The teacher will conduct several assessments during the lesson. The anticipatory activity works as a beginning assessment that evaluates their understanding of the difference between needs and wants. Several points in the lesson include the teacher will walk around to check for understanding. This includes the rubber band activity, in which the teacher asks students about the difference between necessities and luxuries (informal formative).

The Hurricane Katrina activity is a critical-thinking assignment that allows students to apply concepts to real-life situations. This is a formal/formative assessment as it will be taken home at the end of the day and be formally graded. The graphing activity, which uses a gradual release of responsibility, is also an informal/formative assessment and requires the higher-order thinking that incorporates "application" of the content.

Accommodations for English Learners, Striving Readers and Students with Special Needs

Students with other needs are accommodated in various ways. First and foremost, the teacher incorporates many forms of differentiated teaching. For example, the anticipatory and rubber band activity are both hands-on. They work well to incorporate ELs, and striving readers. ELs are accommodated because they are visually engaged; this means that they can "see" the concept. Even if the student struggles with reading, writing, and listening skills, most languages utilize the same number system. Pairing the visual with the chart, students have more of an opportunity to grasp the concept without fully understanding the language or being able to read at grade level.

Also, all vocabulary is displayed throughout the entire class and guided notes require minimal writing. This means students with I.E.P.s will not feel rushed and have the ability to "keep up". Videos and writing is also incorporated. The former caters to visual learners whereas the critical-thinking portion can allow GT students to reach further into the concept.

Finally, the mathematical portion of the class includes a gradual release of responsibility. This is because it is extremely complex for this age group especially for students with I.E.P.s including the ELs, and striving readers. These math problems are also accompanied a "Cheat Sheet," which breaks down the math both in numerical form, and written form. Not only does this help the entire class, but it will also help other needs students because they can either read, view the breakdown, or work backwards to finish the assignment. The homework also utilizes this because the students will bring home their guided notes and the "Cheat Sheet".

Resources (Books, Websites, Handouts, Materials)

- YouTube Video: "The Price Elasticity of Demand"
- YouTube Video: "Interviews with Hurricane Katrina"
- Prezi: "Elasticity"
- Cheat Sheet: Factoring Elasticity of Demand
- Shell: Elasticity
- Empty Pizza Box
- Empty Gas Can
- Starbucks Cup
- Shoebox
- Candy Bar
- Rubber Bands
- Permanent Markers