we the economy
20 SHORT FILMS YOU CAN’T AFFORD TO MISS

lesson supply and dance, man
CURRICULUM CONNECTIONS
This lesson fits in perfectly with units that address curriculum standards in economics, thinking and reasoning, business, math, civics, government, media studies, and finance.

SAMPLE STANDARDS ALIGNMENTS

CCSS.ELA-LITERACY.RL.9-10.6 Determine an author’s point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.

CCSS.ELA-LITERACY.RL.11-12.5 Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

CCSS.ELA-LITERACY.RH.9-10.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.

CCSS.MATH.CONTENT.7.SP.A.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

CCSS.MATH.CONTENT.6.SP.A.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.

CCSS.MATH.CONTENT.HSS.MD.B.5.B Evaluate and compare strategies on the basis of expected values.

CCSS.MATH.CONTENT.HSS.ID.C.9 Distinguish between correlation and causation.

CCSS.MATH.CONTENT.8.SP.A.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

CCSS.MATH.CONTENT.8.SP.A.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.

CCSS.ELA-LITERACY.RH.9-10.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social science.

CCSS.ELA-LITERACY.W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

CCSS.ELA-LITERACY.W.11-12.1.A Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.

CCSS.ELA-LITERACY.RST.9-10.5 Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).

CCSS.ELA-LITERACY.RST.9-10.7 Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

CCSS.ELA-LITERACY.RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.
LESSON PREPARATION

- Prepare a monitor with Internet access to screen “Supply and Dance, Man” at www.wetheeconomy.com/films (TRT 7:33)
- Prepare one “Homework Pass” to be used in the class activity
- Prepare copies of Student Handout: Supply and Demand Grid for distribution

KEY WORDS AND PHRASES

Market, market forces, supply, demand, equilibrium shortage, surplus, fair market value

STUDENT OBJECTIVES

- Students will be introduced to the idea of market forces.
- Students will participate in an experiment that illustrates the laws of supply and demand.
- Students will analyze the variables that impact the value of goods and services in a free market.
- Students will develop their own understandings of how the laws of supply and demand affect the value of a good or service.
- Students will assess their understanding of the material presented in class by preparing an artistic representation of the information.

REQUIREMENTS

MATERIALS

- Monitor/projector, and computer with Internet access
- Blackboard, whiteboard, or chart paper
- Student Handout: Supply and Demand Grid
- Homework Pass

TIME:

- 1 class period

TECHNIQUES AND SKILLS

Vocabulary building, large group discussion, problem solving, critical and analytical thinking, cinematic analysis, weighing pros and cons, listening skills, creating solutions, considering abstract consequences, and research
PROCEDURES

1. Ask the class what they think a “market” is. Allow a few minutes for students to volunteer definitions, associations, and connotation, and to reach a consensus on a working definition of this term.

2. Ask students to think of some laws and rules that govern a market. Encourage them to think from both the merchant’s (seller’s) and the customer’s (buyer’s) perspectives. Examples might be “no stealing,” or “you must sell quality goods.”

3. Ask students to volunteer an example of an item that they and their friends purchase often. Ask them what factors they think sets the price of this item. Examples might be: availability (supply), popularity (demand), reputation/status associated with item, usefulness, advertising, etc.

4. Explain that in addition to the rules and laws that are imposed upon a market to regulate it and keep it fair, there are also forces that actually evolve from the markets themselves, which shape the way a market works.

5. Tell the class that they will be exploring two such market forces in class today: the forces of SUPPLY and DEMAND.

6. Distribute Student Handout: Supply and Demand Grid. Tell the class that they will be using this handout to chart the shifts in supply and demand in an experiment they’ll be conducting momentarily.

7. Instruct everyone in the class to stand up in their places.

8. Hold up the Homework pass. Explain to the class that you will be auctioning this pass off, and that whoever wins the auction can submit it in lieu of one homework assignment of their choosing.

Note: If you are uncomfortable actually “selling” a homework pass, you can conduct this as a thought experiment, use valued tokens, auction off a candy bar instead, or, alternatively, at the end of the exercise you can tell the class that everyone gets one free homework pass, in order to be fair.

9. Explain that you will begin calling off prices in $.10 intervals. When a price is called out that is too expensive for them, they should sit down. Whoever is left standing at the end, wins the auction.

10. Then, tell students that when they sit down, indicating that they’ve left the auction, they should write down the last price called – that is, the highest price they were willing to pay – in their notebook.

11. In addition, using a pencil, they should try to chart the trend in people standing as it relates to the cost of the Homework Pass on their Student Handout.

12. Begin the auction. Start at $0. Everyone is standing. Then call out “$.10” and then wait one second. Call out “$.20” and wait one second. Continue in increments of ten cents until all but 3 students are sitting.

13. Ask the students what they noticed about the number of people willing to purchase a homework pass as the price went up. Did the number of people go up or down? Why?

14. What does their student handout look like after this auction? What did they notice regarding the relationship between price and demand (the number of students standing)?
15. Tell the students that they will now have an opportunity to make some money by auctioning off a homework pass to the highest bidder. If they don’t sell, they may keep their Homework Pass for their own use; meaning, they should consider at what price it is more valuable to them to keep the pass, vs the amount of money they would be making as a profit.

16. Instruct the students to stand up again. Explain that they should remain standing until they hear a price for which they would be willing to sell their pass, and then they should sit. Remind the students that when they sit, they should write down the last price called – that is, the lowest price they were willing to accept – in their notebook.

17. Begin the auction. Start at $3. Everyone is standing. Then call out “$2.90” and then wait one second. Call out “$2.80” and wait one second. Continue in increments of ten cents until all but 3 students are sitting.

18. Ask the students what they noticed about the number of people willing to sell a homework pass as the price went down. Did the number of people go up or down? Why?

19. What does their student handout look like after this auction? What did they notice regarding the relationship between price and supply (the number of students standing)?

20. Tell the class that they just illustrated the laws of supply and demand – that is, the impact that price has on the number of people willing to purchase that item, as well as on the number of items people are willing to sell.

21. Instruct students to direct their attention to the monitor/screen. Explain that they will be watching a short film that illustrates these market forces in a bit more detail. Play “Supply and Dance, Man” (TRT 7:33).

22. After the film, conduct a whole-group discussion using some or all of the following questions as a guide:
   - What is the definition of a market?
   - What is a market force?
   - How does the consumer interest in the canes start?
   - What makes the price go up initially?
   - What is Kristen and Jonathan’s motivation for ordering more canes?
   - What are the factors that cause the price of the canes to continue to go up?
   - What causes the surplus?
   - How does the surplus affect the cost of the canes?
   - What are the factors that cause the price of the canes to continue to go down?
   - What is equilibrium?

23. For homework, students should create a comic strip, poster, or other visual art presentation that illustrates the forces of supply and demand, just as the dance routine in Supply and Dance, Man illustrated it using the example of selling canes. In their comic, they should invent a fictitious business and show how the business’s success shifts with supply and demand. Encourage students to include as many details as possible, including the name of the business, description of the business, the cost of the good or service that the business provides, ideas for increasing demand (sales, promotions, advertising, etc.). Note: Students may watch the film again at home by going to www.wetheeconomy/films/, and can incorporate data or information from other sources including films, books, articles, etc.
**STUDENT HANDOUT: SUPPLY AND DEMAND GRID**

**DIRECTIONS:** As the auctions develop in class, try to chart how many students are standing as the price changes. Create one line to show the number of students standing when the students are the customers (purchasers) as the price per item goes UP. Then, create another line to show the number of students standing when the students are merchants (sellers) as the price per item goes DOWN. See where these lines intersect. What does this tell you about the fair market value of this item?