The Laws of Supply and Demand

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SUBJECT(S): Economics

GRADE LEVEL(S): 9, 10, 11, 12

\equiv OVERVIEW:

This lesson is an introduction to the laws of supply and demand. In this lesson, students will build on basic knowledge of supply and demand by carefully considering the difference between individual and aggregate economic choices. Using the article "McCormick's Alan D. Wilson on Pricing, Innovation and the 'Romance of Spice'" students will look at how the larger economy develops from individual actors' rational economic choices. This lesson will also briefly preview concepts of equilibrium and elasticity (which are both covered in-depth later in this unit).

\equiv NBEA STANDARD(S):

- Economics, I. Allocation of Resources
- Economics, IV. Markets and Prices

\equiv RELATED ARTICLES:

- "Wharton Insights on the Impact and Implications of Coronavirus"
- "The Supply Chain: Who Knew that Every Oreo Makes a Journey?"
- "Insights from the Fall of Aleppo"
- "Inside the Bee Economy"
- "Immigration Reform in America: The People, the Proposals and the Economics"
- "Exploring the Economics of Everyday Life"
- "A 'Sneakerhead' Shares His Simple Strategy: Buy Low and Sell High"

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Common Core Standard(s):

Mathematics (N-Q), "Reason quantitatively and use units to solve problems"

Objectives/Purposes: The purpose of this lesson is to introduce students to the *law of supply* and the *law of demand*.

- Students will be able to explain the law of supply.
- Students will be able to explain the law of demand.
- Students will understand how individual supply and demand curves affect an *aggregate supply* and *aggregate demand*.

Knowledge@Wharton Article: "McCormick's Alan D. Wilson on Pricing, Innovation and the 'Romance of Spice'"

Other Resources/Materials:

For Teachers:

- Internet Access (Outside of the Classroom)
- Printer/Copier
- Access to Chalkboard/Whiteboard

For Students:

- Pen
- Copies of Worksheet

Activity:

The lesson is divided into five parts: (1) Introduction, (2) Guided Reading, (3) Class Discussion, (4) Exploration Activity, and finally (5) Closing

1. Introduction (5-10 mins)

Introduce this unit to students as a unit on "price." Tell students that we will be spending the next few days thinking about why things cost a certain amount, and why those prices change over time.

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Before starting the lesson, ask students what their initial thoughts are. Have students pick an object in the room, e.g. a book, an article of clothing. Ask them how much they think it costs. Ask them why they think it costs that much. Next, ask them how much they would be willing to pay for it. Is the cost *different* from what they are willing to pay? Why?

Once several students have answered, tell students that we can begin to answer these questions by looking at *supply* and *demand*. Briefly define both terms. *Supply* is the amount you are willing to sell at a given price. *Demand* is the amount you are willing to buy at a given price. As an example, we will be looking at how the laws of *supply* and *demand* apply to a specific product...

2. Guided Reading (5-10 mins)

Students should read through the article "McCormick's Alan D. Wilson on Pricing, Innovation and the 'Romance of Spice'." Encourage students to look at the article from two perspectives: (1) the supply-side perspective of McCormick, and (2) the demand-side perspective of the grocery shopper.

3. Class Discussion (5-10 mins)

Once students have finished reading, the teacher should encourage students to briefly summarize the article.

Using the article as a guide, introduce students to the distinction between *individual* and *aggregate* decision-making. If your class has already finished the "Intro to Econ" unit, remind them of the supply & demand curves they have already seen. Create a simple graph with "Price" on the Y-axis and "Quantity" on the X-axis (Figure 1). Start off with an individual student.

Ask a volunteer to take on the role of the consumer. Ask the volunteer to pick a common product (e.g. bottled water, clothes, etc.). Ask the volunteer how many of that product he or she would buy at various prices. Pick another volunteer and repeat the exercise. Use two or three volunteers to describe *the law of demand* — as prices increase, demand decreases.

Similarly, ask for volunteers to take on a different role. Tell the volunteers that they already own a certain product. For example, a volunteer already owns 10 bottles of Gatorade. Ask the student how many of those bottles she would sell to you, the teacher, at various prices. How many bottles would you give up for \$.05 per bottle? For \$1 per bottle? For \$10 per bottle? Again, repeat the exercise with other students. Use the volunteers' answers to describe *the law of supply* — as prices increase, supply increases.

4. Exploration Activity (5-10 mins)

After this demonstration the lesson shifts from individual supply and demand curves to aggregate supply and demand curves. Break students into groups of three or four. Give each group a copy of Worksheet 3: Adding It All Up.

5. Closing (1-5 mins)

Once students have finished the worksheet, briefly remind them of the *law of supply* and the *law of demand*. Tell students that these two laws will be the cornerstone of everything they cover in the following lessons.

Tying It All Together:

Assessment & Extension

During the lesson, use the group time to gauge student understand. For both individual and aggregate graphs, demand should decrease as price goes up. If some students' graphs differ (e.g. if demand *increases* with price) ask the group why this might be the case.

Teachers can also assess understanding by opening the next lesson with an open response, asking students to explain the *law of supply* and *law of demand* in their own words.

Practice Outside of the Classroom:

Outside of the classroom, students should look for examples of the laws of supply and demand. In their own lives, can they recognize when someone supplies more at a high price? Demands more at a low price?

What Worked and What I Would Do Differently:

I found that repetition was the key to this lesson. At different points in the lesson, I had each student come to the board to act as "supply" or "demand." In particular, we thought about cases of soda. The "supplier" had 24 cans of soda. I asked each supplier how many cans he or she would sell at various prices, from \$.05 to \$5 per can. Similarly, each buyer ("demand") could buy anywhere from 1 to 24 cans (i.e. the whole case). How many cans would they buy for different prices?

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