

Day 1: The Law of Demand

<p>Student Focused Instructional/Content Standard Name of Content Standard: MD College and Career Ready Reading Standards for Social Studies, 10-12. Standard: RH.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.</p> <p>Name of Content Standard: College, Career, And Civic Life (C3) Framework For Social Studies State Standards Standard: D2.Eco.3.9-12. Analyze the ways in which incentives influence what is produced and distributed in a market system.</p>	
<p>Teacher Focused Professional Standards: Name of Professional Standard: Danielson Framework Components</p> <p>Description of standard: Component 3b: Using Questioning and Discussion Techniques Questions of high-quality cause students to think and reflect, to deepen their understanding, and to test their ideas against those of their classmates. When teachers ask questions of high quality, they ask only a few of them and provide students with sufficient time to think about their responses, to reflect on the comments of their classmates, and to deepen their understanding.</p>	
<p>Central Focus / Essential Question How do entrepreneurs figure out at what price they should sell their goods and services?</p>	
<p>Lesson Objective By the end of this lesson, students will be able to explain the Law of Demand, or how price influences customers' willingness to purchase a good or a service, by graphing and interpreting a demand curve and schedule.</p>	
<p>Formative Assessment:</p> <ul style="list-style-type: none"> • Do-Now, teacher walks around, checking on review and preview question, identifying and encouraging students with well-considered answers to share. • Law of Demand discovery examples, students write into notes, class discussion in which teacher prompts students to explain why/how they know. • Demand curve worksheet, teacher walks around checking student work, especially the prediction, Law of Demand sentence frames, and price identification. • The demand shift sentence frames are formative extensions to preview following lesson. • Think-pair-share about the Law of Demand before students go to summative. 	
<p>Summative Assessment: Exit ticket explaining the Law of Demand and providing an example. Holistic grade: 1 point each for describing an inverse relationship between price and demand, applying the Law of Demand to a real-life example that illustrates the inverse relationship between price and demand, and for using their own words. 2 points for identifying an unlabeled demand curve.</p>	

Academic Language Demands	Academic Language Support
Vocabulary and/or Symbols Law of Demand Quantity Price Demand Demand schedule Demand curve Factors of production	Teacher will ask students to make connections to the word "law" in other fields. The Law of Demand is illustrated with symbols. A graph is a visual of the demand curve, a table is a visual of the schedule. Visuals and an acronym cue factors of production. Quantity and price are incidental vocabulary terms. These will be labeled, and students

	will hear “how many” and “how much money” multiple times as they graph.
Language Function (select one) Interpret: students will have to interpret the graph.	Sentence frames will help students explain an inverse relationship in academic language. Arrows will also cue that relationship. Teacher will model language with first graph.
Syntax and/or Discourse Students will need to be able to communicate an inverse relationship.	The teacher will supply sentence frames for inverse relationships and demand curve shifters. The summative will not require students to use the exact academic formula, but instead ask students to use their own words, so students will also hear the relationship .

<p>Instructional Materials: 15 Do-Now note and vocabulary sheets 17 copies of demand curve worksheets Red and blue colored pencils (provided by teacher) Student phones or devices, provided by students. Laptops are school-issued, but not every student remembers to bring their computer, so students are allowed to use their phones.</p>		
<p>Technology Integration</p>		
<p>What technology will be used?</p> <ul style="list-style-type: none"> • Electronic whiteboard • Student phones or devices to access Schoology. 	<p>Who is using it?</p> <ul style="list-style-type: none"> • Teacher • Students 	<p>Why is it appropriate?</p> <ul style="list-style-type: none"> • Students need to see a model of how to graph. Slides also allow for more visual aids such as images. • Putting assessments on Schoology allows students to complete them on their own time. They are allowed two tries to repair misunderstandings and add a formative aspect to the summative. Schoology also keeps all resubmissions in one place.
<p>Management Considerations</p>		
<p>Transitions Some transitions are signaled by a bell, others verbally. The final assessment is signaled by the teacher writing the name of the assessment in red ink on the board in the same place that it is always written. A new slide also signals transitions.</p>		
<p>Materials Students should pick up Do-Now Lesson Information and Notes sheet, demand curve worksheets, and pencils as they come in. Students/teacher will pass around a basket to turn in demand curve worksheets. Students know to always keep their Lesson Information and Notes sheet as quizzes are open-book.</p>		
<p>Behavior Management (individuals as well as groups of students)</p> <ul style="list-style-type: none"> • Students will be reminded that they will not need to access personal devices for this lesson until the end of class. A private, neutral verbal reminder or a redirection will be 		

issued for students who have their phone out. If this does not work, students will be asked to charge their phone on the wall.

- Students are chronically late to class. The school policy is that they need a pass from the office to enter class after the bell rings, which also alerts parents and guardians, but tardiness is not to impact grades. The do-now ensures that instructional time is not wasted for students who are on time, but does not penalize students who are tardy. This period of time also allows for a moment of personal connection between the teacher and students.

Instructional Sequence	Approx. Time	Procedure
<p>Planned Beginning: How will you engage students (including activation of prior knowledge)?</p>	<p>15-25</p>	<p>Do-Now:</p> <ul style="list-style-type: none"> • Students copy down lesson objective from board and answer the review and preview questions independently. • Teacher floats around with attendance sheet, commenting on do-now work, welcoming each student, encouraging students with interesting answers to contribute to class discussion. <p><i>Review question:</i> Categorize items into Factors of Production. <i>Preview question:</i> Best guess: How do entrepreneurs figure out at what price they should sell their goods and services?</p> <p>Do-Now Review and Preview Debrief:</p> <ul style="list-style-type: none"> • Teacher leads review, basing time spent on review on informal assessment of student work during the do-now,) students contribute answers and explain why. • Teacher introduces first essential question “How do entrepreneurs figure out at what price they should set their goods and services?”, connecting preview question to the idea of essential questions that the entrepreneur needs to answer besides CELL. • Students contribute best guesses, teacher highlights interesting guesses without judgement, segues to “they have to figure out the customer demand. How much of my product are people willing and able to buy and for what price?”
<p>Development of New Learning (Clearly explain instructional activities in sequence and how they are connected or scaffolded.)</p>	<p>LAI: 30 minutes TI: 20</p>	<p>Learn About It</p> <ul style="list-style-type: none"> • Teacher introduces topic by underlining key terms from objective, introducing key vocabulary student are responsible for learning, which is routine. • Teacher introduces definition of demand and then projects discovery examples, students write answers in notes. • Students share answers and explain their reasoning, prompted by teacher. • Students represent their discovery answers visually with pictures and then verbally by speaking to a partner about what they discovered. • Teacher introduces Law of Demand, students share words they associate w/law. Expecting: can't be broken, law of gravity, etc. Teacher explains that economists call this a law because it is almost always true, just like a scientific law, and it can't be broken, like a legal law. This discussion sets up the later point that the demand curve always slopes down. That is, the demand curve always looks like the curves the students will graph. • Teacher projects demand curve worksheet and models how to plot the demand curve for snowballs on a hot day, using data

		<p>from student survey, leads students through next three questions.</p> <p>Try It</p> <ul style="list-style-type: none"> • Students complete a demand curve independently with a second set of data about snowball demand in the winter and complete the remaining questions, which are modeled off of the first three.
<p>Enrichment How will you challenge students who have demonstrated mastery?</p>		<p>Students who finish early should answer the extension question on the worksheet:</p> <ol style="list-style-type: none"> 1. Students are asked to compare the two graphs to set up the next day's lesson. 2. A demand curve shows that the greatest number of customers will only buy at a price that is much lower than the cost to produce that good. This is a big problem for the seller. What are some things the seller might do to fix the problem? <p>If little review is needed at the beginning of class, the teacher will use questioning to explore the enrichment questions.</p>
<p>Remediation How do you assist students who need additional support?</p>		<p>Teacher walks around during the Try-It, asking clarifying questions, prompting students to explain their answers, answering questions, and will insert whole class correction or explanation if enough students miss an answer or are struggling. Students are also encouraged to raise their hand if they need help.</p>
<p>Planned Ending or Closure: Learner-centered summary of content related to lesson objective Homework (if applicable)</p>	15	<p>Students respond in an exit ticket in which they explain the Law of Demand as if they were explaining it to a friend and include their own real-life example that demonstrates the Law of Demand. They also identify a demand curve.</p>

Day 2: Demand Shifters

<p>Student Focused Instructional/Content Standard Name of Content Standard: MD College and Career Ready Reading Standards for Social Studies, 10-12. Standard: RH.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.</p> <p>Name of Content Standard: College, Career, And Civic Life (C3) Framework For Social Studies State Standards Standard: D2.Eco.3.9-12. Analyze the ways in which incentives influence what is produced and distributed in a market system.</p>

Teacher Focused Professional Standards:

Name of Professional Standard: Danielson Framework Components

Description of Standard: Component 2b: Establishing a Culture for Learning. The classroom is characterized by high cognitive energy, by a sense that what is happening there is important, and by a shared belief that it is essential, and rewarding, to get it right. There are high expectations for all students; the classroom is a place where the teacher and students value learning and hard work.

Central Focus / Essential Question

What causes shifts in what consumers are willing and able to pay for a good or service?

Lesson Objective

By the end of this lesson, students will be able to analyze why the demand for certain products shifts by applying demand shifter concepts and defending their analysis.

Formative Assessment:

Do-now preview questions, note-taking on video, personal whiteboard activity, post-its activity with gallery walk. Teacher looks for widespread misunderstandings to correct during whiteboard activity, makes corrections during post-its activity.

Summative Assessment:

Students take a short quiz. This is the only graded aspect of today's lesson. 9 points are graded objectively. Students are either wrong or right. 3 points are graded subjectively. Students are asked to explain in a short, written response what happens to the demand curve for flowers right before Valentine's Day and why. Multiple shifters and both directions are possible as long as students explain their reasoning. 1 point if students include a shifter and a direction shift, and one point each for an explanation of why they think that shifter and direction shift apply that shows an accurate understanding of both concepts.

Academic Language Demands	Academic Language Support
Vocabulary and/or Symbols Demand shifters Normal good Inferior good Substitute Complement	Teacher will make a physical gesture to support complement and substitute understanding. During Learn About It, teacher will define inferior vs. normal and leave the definition on the board. Students will receive a graphic organizer of definitions for the demand shifters. Students will engage in two activities in which they use the shifter vocab.
Language Function (select one) Students will need to be able to <i>explain</i> why a particular demand shifter fits an example.	Students will have many opportunities to hear example explanations and to practice their own explanations before Students will receive a graphic organizer of definitions for the demand shifters and take notes on examples.
Syntax and/or Discourse Students will need to explain using language like, "This is an example of x, <i>because...</i> "	Students will have many opportunities to hear example explanations and to practice their own explanations before the summative assessment. The teacher will constantly prompt students to explain by asking "why."

<p>Instructional Materials: Demand shifter “cheat sheet” (15) Whiteboards (15) Whiteboard markers (15) Whiteboard erasers (7) Post-its (60, 4/student) Poster board paper</p>		
<p>Technology Integration</p>		
<p>What technology will be used?</p> <ul style="list-style-type: none"> • Electronic whiteboard • Student phones or devices to access Schoology. 	<p>Who is using it?</p> <ul style="list-style-type: none"> • Teacher • Students 	<p>Why is it appropriate?</p> <ul style="list-style-type: none"> • Students need to see a model of how to graph. Slides also allow for more visual aids such as images. • Putting assessments on Schoology allows students to complete them on their own time. They are allowed two tries to repair misunderstandings and add a formative aspect to the summative. Schoology also keeps all resubmissions in one place.
<p>Management Considerations</p>		
<p>Transitions Some transitions are signaled by a bell, others verbally. The final assessment is signaled by the teacher writing the name of the assessment in red ink on the board in the same place that it is always written. A new slide also signals transitions. Partners will be projected on the board. While teacher reads out partners, students stand up and move to work together. Students have only been together 1.5 weeks at this point and are still getting to know each other.</p>		
<p>Materials Students will pick up whiteboards, shifter cheat sheet, and Lesson Notes and Information Sheet on their way into class. Students will not receive a whiteboard marker until the activity to prevent misuse, student will pass out markers. Teacher will pass out erasers to conserve resources. Students will pass around post-it notes, taking four each.</p>		
<p>Behavior Management (individuals as well as groups of students)</p> <ul style="list-style-type: none"> • Students will be reminded that they will not need to access personal devices for this lesson until the end of class. A private, neutral verbal reminder or a redirection will be issued for students who have their phone out. If this does not work, students will be asked to charge their phone on the wall. • Students are chronically late to class. The school policy is that they need a pass from the office to enter class after the bell rings, which also alerts parents and guardians, but tardiness is not to impact grades. The do-now ensures that instructional time is not wasted for students who are on time but does not penalize students who are tardy. This period of time also allows for a moment of personal connection between the teacher and students. 		

Instructional Sequence	Approx. Time	Procedure
Planned Beginning: How will you	10	Do-Now: <ul style="list-style-type: none"> • Students copy down lesson objective from board and answer the review and preview questions independently.

engage students (including activation of prior knowledge)?		<ul style="list-style-type: none"> • Teacher floats around with attendance sheet, commenting on do-now work, welcoming each student, encouraging students to share answers that are particularly interesting. <p><i>Review question:</i> What is the definition of customer demand? <i>Preview questions:</i></p> <ol style="list-style-type: none"> 1. If your goal is to save as much money as possible, when is the best time of the year to buy a bag of mini-snickers bars? Why? 2. You've been working for \$13 when suddenly your boss gives you a \$2 raise. When are you more likely to buy a new pair of Nikes: before or after the raise? When are you more likely to buy knock-off sneakers at Target? Why? 3. If you buy a package of chocolate chip cookies, are you more or less likely to also buy milk? Why?
Development of New Learning (Clearly explain instructional activities in sequence and how they are connected or scaffolded.)	LAI: 20 Try It: 45	Learn About It <ul style="list-style-type: none"> • Teacher introduces topic by underlining key terms from objective, pulls out the key vocab that students are responsible for learning, and projects the essential question and the definition of demand as a review. • Moves to slide with student work on it showing the hot day and cold day demand for snowcones. Uses the student example to talk about right/rise and left/less shifts and builds off of prior knowledge from the day before about when demand for snowballs is highest. Asks, what change? Expecting price or weather. If price, this is an opportunity to point out that the price points and the quantities don't change, just the curve itself. • Teacher introduces SEPTIC acronym and demand shifter definition. • Class watches ACDC video on milk and demand shifters. Teacher pauses the video to clarify and allow students to add examples to their cheat sheets. Teacher connects expectation, complement, and income to the do-now preview questions and elicits student explanations. Try It <ul style="list-style-type: none"> • <i>Whiteboard activity:</i> Teacher projects examples on board. Students write on personal whiteboards which shifter is at work and whether the curve would move to the right or left. • Students with correct answers are called on to explain their reasoning. If many students miss one, then the teacher may ask students to explain their reasoning to surface the misunderstanding. • <i>Post-it activity:</i> Students move into pairs projected on board. Each student should split up the shifters, write their name on the back of 4 sticky notes and write their own example on their own sticky. Before they "post" on butcher paper hung around the classroom, they will talk with their partner who should sign off on it.
Enrichment How will you challenge students who have demonstrated mastery?		Students who finish early should gallery walk around the room, starring the examples they think are the most accurate and most creative and placing a check on examples that need revision.

Remediation How do you assist students who need additional support?		<ul style="list-style-type: none">• The teacher will keep note during the whiteboard activity who might need extra help. The teacher will then monitor these students' post-it examples and have student re-attempt with teacher or peer support.• For the exit ticket, teacher encourages students who are unsure to look at the examples on the poster boards and see which sound most similar. Students may also use cheat sheets on the exit ticket/quiz.
Planned Ending or Closure:	15	Students navigate to Schoology to take a short, open-note quiz over demand, demand curves, and demand curve shifts.