High School AP Macroeconomics Curriculum

Course Description: AP Macroeconomics is a course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students’ familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students will learn how the measures of economic performance, such as gross domestic product (GDP), inflation, and unemployment are constructed and how to apply them to evaluate the macroeconomic conditions of an economy. The course recognized the global nature of economics and provides ample opportunities for students to examine the impact of international trade and finance on national economies. Various economic schools of thought are introduced as students consider solutions to economic problems. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.
## Scope and Sequence:

<table>
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<th>Timeframe</th>
<th>Unit</th>
<th>Instructional Topics</th>
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<td>3 Weeks</td>
<td>Financial Sector</td>
<td>Topic 1: Money, Banking and Financial; Markets&lt;br&gt;Topic 2: Central Bank and Control of Money Supply&lt;br&gt;Topic 3: Loanable Funds Market</td>
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Unit 1: Basic Economic Concepts

Subject: AP Macroeconomics
Grade: 11th-12th
Name of Unit: Basic Economic Concepts
Length of Unit: 3 Weeks

Overview of Unit: The purpose of Unit 1 is to lay out basic economic principles that will serve as building blocks for the rest of the class. The economic principles can be grouped into three categories: how people make decisions, how people interact, and how the economy works as a whole. Throughout the class, references will be made repeatedly to these principles.

Priority Standards for unit:

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 (CEE-1).
- Different methods can be used to allocate goods and services. People acting individually or collectively must choose which methods to use to allocate different kinds of goods and services (CEE-3).
- Evaluate different methods of allocating goods and services, by comparing the benefits to the costs of each method (CEE-3).
- Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations (CEE-5).

Supporting Standards for unit:
- Evaluate different methods of allocating goods and services, by comparing the benefits to the costs of each method (CEE-3).
- Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
  - Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  - Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
  - Contribute to project teams to produce original works or solve problems.
- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources (ISTE 4 - Critical Thinking, Problem Solving, and Decision Making).
  - Identify and define authentic problems and significant questions for investigation.
  - Plan and manage activities to develop a solution or complete a project.
  - Collect and analyze data to identify solutions and/or make informed decisions.
  - Use multiple processes and diverse perspectives to explore alternative solutions.
Essential Questions:
1. Why trade among people or nations can be good for everyone?
2. Why do economists apply the methods of science?
3. What is the difference in the meaning of absolute advantage and comparative advantage?

Enduring Understanding/Big Ideas:
1. The fundamental lessons about interactions among people are that trade can be mutually beneficial, that markets are usually a good way of coordinating trades among people, and that the government can potentially improve market outcomes if there is some sort of market failure or if the market outcome is inequitable.
2. Economists try to address their subject with a scientist’s objectivity. Like all scientists, they make appropriate assumptions and build simplified models in order to understand the world around them. Two simple economic models are the circular-flow diagram and the production possibilities frontier.
3. There are two ways to compare the ability of two people in producing a good. The person who can produce the good with a smaller quantity of inputs is said to have an absolute advantage in producing the good. The person who has the smaller opportunity cost of producing the good is said to have a comparative advantage. The gains from trade are based on comparative advantage, not absolute advantage.

Unit Vocabulary:

<table>
<thead>
<tr>
<th>Academic Cross-Curricular Words</th>
<th>Content/Domain Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Demand</td>
<td>● Absolute Advantage</td>
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<tr>
<td>● Economics</td>
<td>● Circular Flow</td>
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<tr>
<td>● Efficiency</td>
<td>● Comparative Advantage</td>
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<td>● Equity</td>
<td>● Marginal</td>
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<tr>
<td>● Incentive</td>
<td>● Normative Statements</td>
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<tr>
<td>● Supply</td>
<td>● Opportunity to Business Cost</td>
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<tr>
<td>● Trade</td>
<td>● Positive Statements</td>
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<tr>
<td></td>
<td>● Production Possibilities Frontier</td>
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<tr>
<td></td>
<td>● Rational</td>
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<td></td>
<td>● Scarcity</td>
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Resources for Vocabulary Development: Principles of Economics by Mankiw, 4e; Quizlet.com; Investopedia.com
Engaging Experience 1
Title: Economic Systems
Suggested Length of Time: 1 Day
Standards Addressed

Priority:
- Different methods can be used to allocate goods and services. People acting individually or collectively must choose which methods to use to allocate different kinds of goods and services (CEE-3).

Supporting:
- Evaluate different methods of allocating goods and services, by comparing the benefits to the costs of each method (CEE-3).

Detailed Description/Instructions: Using the economics systems handout, below, and knowledge gained through lecture, students will research and present different nations that meet the criteria for allocation and ownership of resources in different economic systems.

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Determinations of prices charged and products made</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC</td>
<td>COMMAND</td>
</tr>
<tr>
<td></td>
<td>COMMUNISM</td>
</tr>
<tr>
<td>PRIVATE</td>
<td>MARKET (DEMAND)</td>
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<tr>
<td></td>
<td>SOCIALISM</td>
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<tr>
<td></td>
<td>FASCISM</td>
</tr>
<tr>
<td></td>
<td>CAPITALISM</td>
</tr>
</tbody>
</table>

- Private ownership occurs in Fascism and Capitalism.
- Private ownership is very important when the question “when should we produce” is asked. Or “how much should we produce?”
- Think of the fish in the sea. No private ownership and we harvesting not only too early, before they are properly matured, but harvesting too much and destroying the ability of the fish to reproduce.
● Consider the elephants in Africa. Hunted nearly to extinction until tribes were paid to ensure they lived.
● Tragedy of the commons is the “classic” example. Too many cattle grazing on commonly owned property.

**Bloom’s Levels:** Analyze

**Webb’s DOK:** 3

**Rubric:** To be created
Topic 2: Choice

Engaging Experience 1
Title: So Many Things To Do So Little Time
Suggested Length of Time: 15-20 Minutes
Standards Addressed

Priority:
- 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 (CEE-1)

Supporting:
Detailed Description/Instructions: Give students a list of activities with corresponding time requirements: sleep, 8 hours; sleep, 6 hours; eat breakfast, 30 minutes; ride a bike, 1 hour; go hiking, 2 hours; study, 3 hours; study, 2 hours; go to class, 4 hours; go to class, 6 hours; watch TV, 2 hours; watch TV, 6 hours; take a nap, 1 hour; work, 8 hours; work, 4 hours; etc.

Make sure that there are many choices and that there are many pleasurable experiences—too much for a 24-hour period. Ask students which Principle of Economics this illustrates from Mankiw chapter one.

If they do not say 1, 2, 3, and 4, help them see that this exercise has trade-offs in the choices they make, that each choice has an opportunity cost, that deciding whether or not to sleep 4 more hours may depend on whether you have already slept for 6, and that choices may be influenced by the incentives the student faces. For example, a student who is about to be placed on academic probation has an incentive to study harder.

Bloom’s Levels: Apply
Webb’s DOK: 2
Rubric: To be created

Engaging Experience 2
Title: Scarce Chairs!!
Suggested Length of Time: 30-40 Minutes
Standards Addressed

Priority:
- 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 (CEE-1)

Supporting:
• Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
  ○ Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  ○ Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
  ○ Contribute to project teams to produce original works or solve problems.

**Detailed Description/Instructions:**

Before your Econ students arrive for their first full class meeting, remove chairs until there are only half as many as you will have students.

Tell students that the custodian removed the chairs for repairs, or they were taken to another room for a presentation or something. Anyway, you don’t know when they’ll come back and it may be a couple of weeks. For now, we are stuck with this many chairs, and we have to figure out a way to resolve this problem! Tell the students it’s up to them to decide how our limited number of chairs will be allocated. Have them brainstorm solutions out loud while you write their suggestions on the board. Try to come up with 6-10 possible solutions, then have the students vote on the one they would like to see enacted. They can only vote once! Write the tallies next to each option on the board. If there is a tie for #1, have the whole class vote between the two or three options you’ve narrowed it down to until there is one clear winner.

The Economist’s Solution: Once the students have voted on their favorite solution, share with them the economist’s favorite solution. It is known as a sealed-bid auction. Give each student a slip of scrap paper and have him write two things: 1) His name, and 2) the maximum price he would be willing and able to pay each class period to have a chair to sit on. Collect the results, and in front of the students, organize their bids from highest to lowest. If there is a tie on the margin, have the students whose bids were identical bid again, writing their highest price on the back of the same slip of paper, then re-rank. The students with the highest bids will get a chair! For example, I had 17 students, and only 8 chairs. The highest bid was $10, while three students were not willing to pay anything. Four kids were willing to pay $1, but there were only two chair left at that point. When they re-bid, one was willing to pay $2, one $1.75, $1.25 and $1.20. Therefore, the two remaining chairs went to the students willing to pay $2 and $1.75.

Finally, tell the winners that they can take a seat, and that everyone else must stand! At this point, of course, you can send the lowest bidders out to fetch the missing chairs and begin your debrief.

*Cite: Jason Welker, Economics in Plain English Blog, August 14, 2012*

[http://welkerswedinomics.com/blog/2012/08/14/my-first-economics-lesson-scarce-chairs/](http://welkerswedinomics.com/blog/2012/08/14/my-first-economics-lesson-scarce-chairs/)

**Bloom’s Levels:** Apply

**Webb’s DOK:** 4

**Rubric:** Class participation
Engaging Experience 1
Title: Trade Creates Wealth
Suggested Length of Time: 40-50 Minutes
Standards Addressed
  Priority:
  - Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations (CEE- 5).

  Supporting:
  Detailed Description/Instructions: This lesson involves students in a trading simulation designed to illustrate a complex marketplace in which goods and services are traded. Students use this experience to investigate the conditions that encourage or discourage trade among individuals. See Appendix A for details.

  Bloom’s Levels: Evaluate
  Webb’s DOK: 4
  Rubric: See Appendix A for scoring guide

Engaging Experience 2
Title: Creating Comparative Advantage Examples
Suggested Length of Time: 15 Minutes
Standards Addressed
  Priority:
  - Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations (CEE- 5).

  Supporting:
  - Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources (ISTE 4 - Critical Thinking, Problem Solving, and Decision Making).
    - Identify and define authentic problems and significant questions for investigation.
    - Plan and manage activities to develop a solution or complete a project.
    - Collect and analyze data to identify solutions and/or make informed decisions.
    - Use multiple processes and diverse perspectives to explore alternative solutions.

  Detailed Description/Instructions: Creating Comparative Advantage Examples
  Materials needed: 3-5 candy bars (or similar items to use as prizes)
  Divide the class into groups of three or four to write a comparative advantage problem of their own. Tell them to make creative, humorous, yet plausible examples.
Give the students fifteen minutes to work on creating their examples at the end of class. Instruct them to bring a neatly written copy of their examples for the next class when each group will present its example to the rest of the class. Students should include tables and figures similar to those used in class. Let the students vote on which group has the best example and award a small prize to the group’s members. Make the examples available to all of the students in the class to use as practice problems for the exam.

**Bloom’s Levels:** Understand  
**Webb’s DOK:** 4  
**Rubric:** To be created
Topic 4: Circular Flow

Engaging Experience 1
Title: The Circular Flow Simulation
Suggested Length of Time: 1 Day
Standards Addressed
  Priority:
  ● Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations (CEE- 5).
  Supporting:
Detailled Description/Instructions: This lesson simulates the circular flow of resources, goods and services in a nation with a closed economy and no government sector. See Appendix B for the activity.
  Cite: Jason Welker, Economics in Plain English Blog, September 8, 2010
  http://welkerswikinomics.com/blog/category/circular-flow-model/
  Bloom’s Levels: Evaluate
  Webb’s DOK: 4
  Rubric: See Appendix B for debriefing questions

Engaging Experience 2
Title: Circular Flow Diagram
Suggested Length of Time: 30 Minutes
Standards Addressed
  Priority:
  ● A market exists when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services (CEE- 7).
  Supporting:
  ● Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources (ISTE 4 - Critical Thinking, Problem Solving, and Decision Making).
    ○ Identify and define authentic problems and significant questions for investigation.
    ○ Plan and manage activities to develop a solution or complete a project.
    ○ Collect and analyze data to identify solutions and/or make informed decisions.
Detailled Description/Instructions: Draw a circular-flow diagram. Identify the parts of the model that correspond to the flow of goods and services and the flow of dollars for each of the following activities.
  ● Selena pays a storekeeper $1 for a quart of milk.
  ● Stuart earns $4.50 per hour working at a fast food restaurant.
  ● Shanna spends $7 to see a movie.
• Sally earns $10,000 from his 10 percent ownership of Acme Industrial. Teachers may consider incorporating multimedia applications as appropriate with this activity.

  Bloom’s Levels: Create
  Webb’s DOK: 3
  Rubric: To be created
Engaging Experience 1
Title: Normative vs. Positive Statements
Suggested Length of Time: 10-15 Minutes
Standards Addressed

Priority:
- Evaluate different methods of allocating goods and services, by comparing the benefits to the costs of each method (CEE- 3).

Supporting:

Detailed Description/Instructions: Classify each of the following statements as positive or normative. Explain.
- Society faces a short-run trade-off between inflation and unemployment.
- A reduction in the rate of growth of money will reduce the rate of inflation.
- The Federal Reserve should reduce the rate of growth of money.
- Society ought to require welfare recipients to look for jobs.
- Lower tax rates encourage more work and more saving.

Bloom’s Levels: Evaluate
Webb’s DOK: 3
Rubric: To be created
Engaging Experience 1
Title: In the Chips Supply and Demand Simulation
Suggested Length of Time: 1 Day
Standards Addressed
   Priority:
   - A market exists when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services. CEE-7a
   Supporting:
   Detailed Description/Instructions: This lesson simulates a market for computer chips. Students, acting as buyers and sellers, will experience the competitive nature of markets. As a result, they will see how competition influences the price of goods and the decisions of buyers and sellers. See Appendix C for details of this activity.
   Bloom’s Levels: Evaluate
   Webb’s DOK: 4
   Rubric: See Appendix C for scoring guide

Engaging Experience 2
Title: Shifts in Supply and Demand Article Review
Suggested Length of Time: 1 - 2 Days, w/ homework
Standards Addressed
   Priority:
   - Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives (CEE- 8).
   Supporting:
   - Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
     ○ Plan strategies to guide inquiry.
     ○ Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
     ○ Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
     ○ Process data and report results.
   Detailed Description/Instructions: Find an article in a recent newspaper or magazine illustrating a change in price or quantity in some market. Analyze the situation using economic reasoning.
   1. Has there been an increase or decrease in demand? Factors that could shift the demand curve include changes in preferences, changes in income, changes in the price of substitutes or complements, or changes in the number of consumers in the market.
2. Has there been an increase or decrease in supply? Factors that could shift the supply curve include changes in costs of materials, wages, or other inputs; changes in technology; or changes in the number of firms in the market.

3. Draw a supply-and-demand graph to explain this change. Be sure to label your graph and clearly indicate which curve shifts.

Ask students to turn in a copy of the article along with their explanation. Warn students to avoid advertisements because they contain little information. They should be wary of commodity and financial markets unless they have a good understanding of the particular market. Markets for ordinary goods and services are most easily analyzed.

Points for Discussion

● Most changes will only shift one curve—either supply or demand—not both.
● Remind students that price changes will not cause either curve to shift. (But shifting either curve will change price.)
● Equilibrium points are not fixed. They change when supply or demand changes.
● Prices will not necessarily return to previous levels nor will quantities.
● Remind the students of the four graphs showing the shifts in supply and demand.

Bloom’s Levels: Analyze
Webb’s DOK: 4
Rubric: To be created
Engaging Scenario

Engaging Scenario (An Engaging Scenario is a culminating activity that includes the following components: situation, challenge, specific roles, audience, product or performance.)

Released AP Microeconomic Free Response Questions and released Multiple Choice questions

Rubric for Engaging Scenario: College Board AP Rubric
<table>
<thead>
<tr>
<th>Topic</th>
<th>Engaging Experience Title</th>
<th>Description</th>
<th>Suggested Length of Time</th>
</tr>
</thead>
</table>
| 1     | Economic Systems          | Using the economics systems handout, below, and knowledge gained through lecture, students will research and present different nations that meet the criteria for allocation and ownership of resources in different economic systems.  
- Private ownership occurs in Fascism and Capitalism.  
- Private ownership is very important when the question “when should we produce” is asked. Or “how much should we produce?”  
- Think of the fish in the sea. No private ownership and we harvesting not only too early, before they are properly matured, but harvesting too much and destroying the ability of the fish to reproduce.  
- Consider the elephants in Africa. Hunted nearly to extinction until tribes were paid to ensure they lived.  
- Tragedy of the commons is the “classic” example. Too many cattle grazing on commonly owned property. | 1 Day |
| 2     | So Many Things To Do So Little Time | Give students a list of activities with corresponding time requirements: sleep, 8 hours; sleep, 6 hours; eat breakfast, 30 minutes; ride a bike, 1 hour; go hiking, 2 hours; study, 3 hours; study, 2 hours; go to class, 4 hours; go to class, 6 hours; watch TV, 2 hours; watch TV, 6 hours; take a nap, 1 hour; work, 8 hours; work, 4 hours; etc.  
Make sure that there are many choices and that there are many pleasurable experiences—too much for a 24-hour period. Ask students which Principle of Economics this illustrates from Mankiwiw chapter one.  
If they do not say 1, 2, 3, and 4, help them see that this exercise has trade-offs in the choices they make, that each choice has an opportunity cost, that deciding whether or not to sleep 4 more | 15-20 Minutes |
hours may depend on whether you have already slept for 6, and that choices may be influenced by the incentives the student faces. For example, a student who is about to be placed on academic probation has an incentive to study harder.


2 Scarce Chairs!!

Before your Econ students arrive for their first full class meeting, remove chairs until there are only half as many as you will have students.

Tell students that the custodian removed the chairs for repairs, or they were taken to another room for a presentation or something. Anyway, you don’t know when they’ll come back and it may be a couple of weeks. For now, we are stuck with this many chairs, and we have to figure out a way to resolve this problem! Tell the students it’s up to them to decide how our limited number of chairs will be allocated. Have them brainstorm solutions out loud while you write their suggestions on the board. Try to come up with 6-10 possible solutions, then have the students vote on the one they would like to see enacted. They can only vote once! Write the tallies next to each option on the board. If there is a tie for #1, have the whole class vote between the two or three options you’ve narrowed it down to until there is one clear winner.

The Economist’s Solution: Once the students have voted on their favorite solution, share with them the economist’s favorite solution. It is known as a sealed-bid auction. Give each student a slip of scrap paper and have him write two things: 1) His name, and 2) the maximum price he would be willing and able to pay each class period to have a chair to sit on

Collect the results, and in front of the students, organize their bids from highest to lowest. If there is a tie on the margin, have the students whose bids were identical bid again, writing their highest price on the back of the same slip of paper, then re-rank. The students with the highest bids will get a chair! For example, I had 17 students, and only 8 chairs. The highest bid was $10, while three students were not willing to pay

30-40 Minutes
anything. Four kids were willing to pay $1, but there were only two chair left at that point. When they re-bid, one was willing to pay $2, one $1.75, $1.25 and $1.20. Therefore, the two remaining chairs went to the students willing to pay $2 and $1.75.

Finally, tell the winners that they can take a seat, and that everyone else must stand! At this point, of course, you can send the lowest bidders out to fetch the missing chairs and begin your debrief.

Cite: Jason Welker, Economics in Plain English Blog, August 14, 2012
http://welkerswikinomics.com/blog/2012/08/14/my-first-economics-lesson-scarce-chairs/

| 3 | Trade Creates Wealth | This lesson involves students in a trading simulation designed to illustrate a complex marketplace in which goods and services are traded. Students use this experience to investigate the conditions that encourage or discourage trade among individuals. See Appendix A for details. | 40-50 Minutes |

| 3 | Creating Comparative Advantage Examples | Creating Comparative Advantage Examples Materials needed: 3-5 candy bars (or similar items to use as prizes)

Divide the class into groups of three or four to write a comparative advantage problem of their own. Tell them to make creative, humorous, yet plausible examples.

Give the students fifteen minutes to work on creating their examples at the end of class. Instruct them to bring a neatly written copy of their examples for the next class when each group will present its example to the rest of the class. Students should include tables and figures similar to those used in class. Let the students vote on which group has the best example and award a small prize to the group’s members. Make the examples available to all of the students in the class to use as practice problems for the exam. | 15 Minutes |

<p>| 4 | The Circular Flow Simulation | This lesson simulates the circular flow of resources, goods and services in a nation with a closed economy and no government sector. See Appendix B for the activity. | 1 Day |</p>
<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Time</th>
</tr>
</thead>
</table>
| Circular Flow Diagram           | Draw a circular-flow diagram. Identify the parts of the model that correspond to the flow of goods and services and the flow of dollars for each of the following activities.  
  - Selena pays a storekeeper $1 for a quart of milk.  
  - Stuart earns $4.50 per hour working at a fast food restaurant.  
  - Shanna spends $7 to see a movie.  
  - Sally earns $10,000 from his 10 percent ownership of Acme Industrial.  
Teachers may consider incorporating multimedia applications as appropriate with this activity. | 30 Minutes |
| Normative vs. Positive Statements | Classify each of the following statements as positive or normative. Explain.  
  - Society faces a short-run trade-off between inflation and unemployment.  
  - A reduction in the rate of growth of money will reduce the rate of inflation.  
  - The Federal Reserve should reduce the rate of growth of money.  
  - Society ought to require welfare recipients to look for jobs.  
  - Lower tax rates encourage more work and more saving. | 10-15 Minutes |
| In the Chips Supply and Demand Simulation | This lesson simulates a market for computer chips. Students, acting as buyers and sellers, will experience the competitive nature of markets. As a result, they will see how competition influences the price of goods and the decisions of buyers and sellers. See Appendix C for details of this activity. | 1 Day      |
| Shifts in Supply and Demand Article Review | Find an article in a recent newspaper or magazine illustrating a change in price or quantity in some market. Analyze the situation using economic reasoning.  
  1. Has there been an increase or decrease in demand? Factors that could shift the demand curve include changes in preferences, changes | 1 - 2 Days, w/ Homework |
in income, changes in the price of substitutes or complements, or changes in the number of consumers in the market.

2. Has there been an increase or decrease in supply? Factors that could shift the supply curve include changes in costs of materials, wages, or other inputs; changes in technology; or changes in the number of firms in the market.

3. Draw a supply-and-demand graph to explain this change. Be sure to label your graph and clearly indicate which curve shifts.

Ask students to turn in a copy of the article along with their explanation. Warn students to avoid advertisements because they contain little information. They should be wary of commodity and financial markets unless they have a good understanding of the particular market. Markets for ordinary goods and services are most easily analyzed.

Points for Discussion
- Most changes will only shift one curve—either supply or demand—not both.
- Remind students that price changes will not cause either curve to shift. (But shifting either curve will change price.)
- Equilibrium points are not fixed. They change when supply or demand changes.
- Prices will not necessarily return to previous levels nor will quantities.
- Remind the students of the four graphs showing the shifts in supply and demand.
Unit 2: Measurement of Economic Performance

Subject: AP Macro Economics
Grade: 11 - 12
Name of Unit: Measurement of Economic Performance
Length of Unit: 3 Weeks

Overview of Unit: Students will experience how Economists use economic measurements for measuring the health of an Economy. Economic prosperity as measured by GDP varies subsequently around the world. The standard of living depends on the nation's ability to produce goods and services. Last the students will see how the Central Bank and Policymakers can manipulate the Invisible Hand of the free markets.

Priority Standards for unit:

- Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services. The amount of money in the economy affects the overall price level. Inflation is an increase in the overall price level that reduces the value of money (CEE- 11).
- Income for most people is determined by the market value of the productive resources they sell. What workers earn primarily depends on the market value of what they produce (CEE- 13).
- Investment in factories, machinery, new technology, and in the health, education, and training of people stimulates economic growth and can raise future standards of living (CEE - 15).
- Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued (CEE- 17).
- Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist (CEE - 17).
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE- 18).
- Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers (CEE- 18).
- Unemployment imposes costs on individuals and the overall economy. Inflation, both expected and unexpected, also imposes costs on individuals and the overall economy. Unemployment increases during recessions and decreases during recoveries (CEE- 19).
- Make informed decisions by anticipating the consequences of inflation and unemployment (CEE- 19).
Supporting Standards for unit:

- Explain how their lives would be more difficult in a world with no money, or in a world where money sharply lost its value.

- Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
  - Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  - Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
  - Develop cultural understanding and global awareness by engaging with learners of other cultures.

- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
  - Plan strategies to guide inquiry.
  - Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
  - Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
  - Process data and report results.
**Essential Questions:**

1. Demonstrate how gross domestic product (GDP) is defined and calculated?
2. How are real and nominal interest rates different?
3. Why productivity is the key determinant of a country’s standard of living?
4. How is unemployment data used to measure the connection between GDP and inflation?

**Enduring Understanding/Big Ideas:**

1. GDP is divided among four components of expenditure: consumption, investment, government purchases, and net exports. Consumption includes spending on goods and services by households, with the exception of purchases of new housing. Investment includes spending on new equipment and structures, including households’ purchases of new housing. Government purchases include spending on goods and services by local, state, and federal governments. Net exports equal the value of goods and services produced domestically and sold abroad (exports) minus the value of goods and services produced abroad and sold domestically (imports).

2. A correction for inflation is especially important when looking at data on interest rates. The nominal interest rate is the interest rate usually reported; it is the rate at which the number of dollars in a savings account increases over time. By contrast, the real interest rate takes into account changes in the value of the dollar over time. The real interest rate equals the nominal interest rate minus the rate of inflation.

3. The standard of living in an economy depends on the economy’s ability to produce goods and services. Productivity, in turn, depends on the amounts of physical capital, human capital, natural resources, and technological knowledge available to workers.

4. The unemployment rate is the percentage of those who would like to work but do not have jobs. The Bureau of Labor Statistics calculates this statistic monthly based on a survey of thousands of households. The unemployment rate is an imperfect measure of joblessness. Some people who call themselves unemployed may actually not want to work, and some people who would like to work have left the labor force after an unsuccessful search.

*Cite: Mankiw, N. Gregory, Principles of Economics, 4th Ed. Ohio: Thomson South-Western, 2007*
**Unit Vocabulary:**

<table>
<thead>
<tr>
<th>Academic Cross-Curricular Words</th>
<th>Content/Domain Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Collective Bargaining</td>
<td>● Capital</td>
</tr>
<tr>
<td>● Consumption</td>
<td>● CPI</td>
</tr>
<tr>
<td>● Inflation</td>
<td>● Diminishing Returns</td>
</tr>
<tr>
<td>● Interest Rate</td>
<td>● Discouraged Workers</td>
</tr>
<tr>
<td>● Investment</td>
<td>● Efficiency Wages</td>
</tr>
<tr>
<td>● Labor Force</td>
<td>● Government Purchases</td>
</tr>
<tr>
<td>● Minimum Wage</td>
<td>● Gross Domestic Product</td>
</tr>
<tr>
<td>● Natural Resources</td>
<td>● Labor Force Participation Rate</td>
</tr>
<tr>
<td>● Net Exports</td>
<td>● Nominal GDP</td>
</tr>
<tr>
<td>● Unemployment</td>
<td>● Nominal Interest Rate</td>
</tr>
<tr>
<td></td>
<td>● Productivity</td>
</tr>
<tr>
<td></td>
<td>● Real GDP</td>
</tr>
<tr>
<td></td>
<td>● Underemployed</td>
</tr>
</tbody>
</table>

**Resources for Vocabulary Development:** Principles of Economics by Mankiw, 4e; Quizlet.com; Investopedia.com
**Engaging Experience 1**

**Title:** Indicators Project

**Suggested Length of Time:** 2 Days

**Standards Addressed**

**Priority:**
- Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers (CEE-18).

**Supporting:**
- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
  - Plan strategies to guide inquiry.
  - Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
  - Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
  - Process data and report results.

**Detailed Description/Instructions:** Students will be assigned to present one of the Economic Indicators used by the Federal Reserve, and create a presentation on the current status of this data.

Economists use a multitude of economic data to create a picture of the current state of the economy in order to advise policy makers. This assignment will familiarize you with some of these indicators and the current state of the economy. You will hone your Internet research skills and develop skills in creating charts and multimedia presentations. You will ultimately present your findings to the class and the class will together assess the current state of the U.S. Economy. You will be “in the shoes of the policy-makers” and create a report on the current state of the economy. This will be an ongoing project. The research and the power-point slide will be prepared in two class periods.

**Assignment:** You will research the assigned topic and prepare graphs in 5 to 7 power-point slides. You will present these slides to the class. The class will create a U.S. Economy report card based on the research and presentations.

*See Appendix D for more details.*

**Bloom’s Levels:** Evaluate

**Webb’s DOK:** 3

**Rubric:** See Appendix D for scoring guide
Engaging Experience 2
Title: Royalty for a Day
Suggested Length of Time: 1 - 2 Days
Standards Addressed

Priority:
● Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist (CEE - 17).

Supporting:
● Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
   ○ Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
   ○ Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
   ○ Develop cultural understanding and global awareness by engaging with learners of other cultures.

Detailed Description/Instructions: Prices usually rise over a period of time. The same items you bought a few years ago may cost more now. For example, a restaurant menu lists its finest steak entree at $22; however, two years ago the same steak was only $20. Inflation is the term used to describe an increase in the overall level of prices. It's an important concept to understand because it's discussed so frequently in the media: Price indexes and inflation measurements are reported almost daily in the financial pages, politicians constantly announce programs to control inflation and economists endlessly debate inflation's effects on economic growth. In general, people don't like inflation because higher prices mean they can purchase less for the same income. However, inflation does not affect everyone in the same way. While many people are hurt by inflation, especially when it is unexpected, others may actually benefit.

This activity is designed to teach you the effects of inflation on different segments of the population: Who is hurt by unanticipated inflation and who benefits? Modeled off a 1950’s game show. Students will listen to different scenarios from individuals of a community. Students will complete a chart after each scenario is presented. They will then decide who is impacted negatively or positively by the change in prices. In this modern version, male and female economics students compete for the honor of "Royalty for a Day" by convincing the audience how much they are suffering because of inflation. Your teacher will provide additional information.

Bloom’s Levels: Evaluate
Webb’s DOK: 4
Rubric: See Appendix E for debriefing questions
Engaging Experience 1
Title: GDP Components
Suggested Length of Time: 1 Day
Standards Addressed
  
  Priority:
  
  ● Investment in factories, machinery, new technology, and in the health, education, and training of people stimulates economic growth and can raise future standards of living (CEE - 15).

  Supporting:

  Detailed Description/Instructions: Students will evaluate what components of GDP will be affected by transactions (if any), and explain how? What components of GDP (if any) would each of the following transactions affect? Explain fully your choice.

  a) A family buys a new refrigerator.
  b) Aunt Jane busy a new house.
  c) Ford sells a Mustang from its inventory.
  d) You by a pizza.
  e) California repaves Highway 101.
  f) Your parents by a bottle of French wine.
  g) Honda expands its factory in Marysville, Ohio.

  Bloom’s Levels: Analyze
  Webb’s DOK: 2
  Rubric: To be created

Engaging Experience 2
Title: Calculating Real vs. Nominal GDP
Suggested Length of Time: 30 Minutes
Standards Addressed
  
  Priority:
  
  ● Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services. The amount of money in the economy affects the overall price level. Inflation is an increase in the overall price level that reduces the value of money (CEE- 11).

  Supporting:

  ● Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources (ISTE 4 - Critical Thinking, Problem Solving, and Decision Making).

  ○ Collect and analyze data to identify solutions and/or make informed decisions.
Detailed Description/Instructions: Students will calculate the GDP, Real and Nominal and be explain why the numbers are different. The Economy of Britannica produces three goods: Computers, DVDs, and pizza. The accompanying table shows the prices and output of the three goods for years 2008, 2009, and 2010.

<table>
<thead>
<tr>
<th>Year</th>
<th>Computers</th>
<th></th>
<th>DVD’s</th>
<th></th>
<th>Pizza</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price</td>
<td>Quantity</td>
<td>Price</td>
<td>Quantity</td>
<td>Price</td>
<td>Quantity</td>
</tr>
<tr>
<td>2008</td>
<td>$900</td>
<td>10</td>
<td>$10</td>
<td>100</td>
<td>$15</td>
<td>2</td>
</tr>
<tr>
<td>2009</td>
<td>1,000</td>
<td>10.5</td>
<td>12</td>
<td>150</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>2010</td>
<td>1,050</td>
<td>12</td>
<td>14</td>
<td>110</td>
<td>17</td>
<td>3</td>
</tr>
</tbody>
</table>

a. What is the percent change in the computer production from 2008 to 2009?
b. What is the percent change in the price of pizza from 2009 to 2010?
c. Calculate the nominal GDP in Britannica for 2008.
d. Calculate the real GDP in Britannica for 2008 using 2008 as the base year.
e. Calculate the real GDP in Britannica for 2010 using 2008 as the base year.

Cite: Krugman’s Macroeconomics for AP, page 117

Bloom’s Levels: Understand

Webb’s DOK: 4

Rubric: To be created
Engaging Experience 1
Title: Standard of Living
Suggested Length of Time: 1 Day
Standards Addressed

Priority:
- Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist (CEE - 17).

Supporting:
- Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
  - Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  - Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
  - Develop cultural understanding and global awareness by engaging with learners of other cultures.
  - Contribute to project teams to produce original works or solve problems.

Detailed Description/Instructions: Students will break into groups of 2. Each pair will be given randomly one of the below topics, and be prepared to debate its merits for improving the welfare of Finland.

Which of the following policies do you think would be most effective at boosting growth and living standards in a poor country over the long run?
- Offer tax incentives for investment by local firms
- Offer tax incentives for investment by foreign firms
- Give cash payments for good school attendance
- Crackdown on government corruption
- Restrict imports to protect domestic industries
- Allow free trade
- Give away condoms

Bloom’s Levels: Create
Webb’s DOK: 2
Rubric: To be created
Engaging Experience 2
Title: Productivity - The Universal Replicator
Suggested Length of Time: 20 Minutes
Standards Addressed

Priority:
● Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist (CEE - 17).

Supporting:

Detailed Description/Instructions: The Universal Replicator is a machine that can replicate any physical good. If a car is put into the Universal Replicator, the machine will create an exact working duplicate at the touch of a button. It will work on any non-living object. Assume this technology becomes widely adopted throughout the country by manufacturers of all types of products. Ask the class to answer the following questions. Give them time to write an answer to a question, then discuss their answers before moving to the next question.

● What impact would the Universal Replicator have on the economy?
● What jobs would not be needed?
● What would happen to the price of goods?
● What kinds of problems would you expect?
● What benefits do you see?
● What kinds of jobs would still be necessary?

Facilitator Notes:
● Of course, the Universal Replicator doesn’t really exist but technological change has had very similar effects. For example, look at the long-term advances in agriculture. Two hundred years ago, 80% of the U.S. labor force worked in farming. Today, farming accounts for only 2% of U.S. jobs. Agricultural production has increased tremendously and food prices have decreased substantially.
● Manufacturing has followed a similar, but less extreme path. Fewer workers are able to produce more goods at lower costs. The “Deindustrialization of America” has been accompanied by increased industrial output.
● As agricultural and manufacturing employment decline, we find more workers in the service sector. Lower prices for agricultural and manufactured goods mean services become relatively expensive. Many public issues, such as concerns about health care, education, and police protection, are affected by this increase in the relative cost of services.
● Like the Universal Replicator, technological progress increases material well-being. The same questions remain: What happens to displaced workers? What happens to the distribution of income? How are by-products, wastes, and pollution handled?


Bloom’s Levels: Evaluate
Webb’s DOK: 3
Rubric: Class Participation
Engaging Scenario (An Engaging Scenario is a culminating activity that includes the following components: situation, challenge, specific roles, audience, product or performance.)

Released AP Microeconomic Free Response Questions and released Multiple Choice questions

Rubric for Engaging Scenario: To be created
### Summary of Engaging Learning Experiences for Topics

<table>
<thead>
<tr>
<th>Topic</th>
<th>Engaging Experience Title</th>
<th>Description</th>
<th>Suggested Length of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indicators Project <img src="image1.png" alt="image" /></td>
<td>Students will be assigned to present one of the Economic Indicators used by the Federal Reserve, and create a presentation on the current status of this data. Economists use a multitude of economic data to create a picture of the current state of the economy in order to advise policy makers. This assignment will familiarize you with some of these indicators and the current state of the economy. You will hone your Internet research skills and develop skills in creating charts and multimedia presentations. You will ultimately present your findings to the class and the class will together assess the current state of the U.S. Economy. You will be “in the shoes of the policy-makers” and create a report on the current state of the economy. This will be an ongoing project. The research and the power-point slide will be prepared in two class periods. Assignment: You will research the assigned topic and prepare graphs in 5 to 7 power-point slides. You will present these slides to the class. The class will create a U.S. Economy report card based on the research and presentations. See Appendix D for more details.</td>
<td>2 Days</td>
</tr>
<tr>
<td>1</td>
<td>Royalty for a Day <img src="image2.png" alt="image" /></td>
<td>Prices usually rise over a period of time. The same items you bought a few years ago may cost more now. For example, a restaurant menu lists its finest steak entree at $22; however, two years ago the same steak was only $20. Inflation is the term used to describe an increase in the overall level of prices. It's an important concept to understand because it's discussed so frequently in the media:</td>
<td>1 - 2 Days</td>
</tr>
</tbody>
</table>
Price indexes and inflation measurements are reported almost daily in the financial pages, politicians constantly announce programs to control inflation and economists endlessly debate inflation's effects on economic growth. In general, people don't like inflation because higher prices mean they can purchase less for the same income. However, inflation does not affect everyone in the same way. While many people are hurt by inflation, especially when it is unexpected, others may actually benefit.

This activity is designed to teach you the effects of inflation on different segments of the population: Who is hurt by unanticipated inflation and who benefits? Modeled off a 1950’s game show. Students will listen to different scenarios from individuals of a community. Students will complete a chart after each scenario is presented. They will then decide who is impacted negatively or positively by the change in prices. In this modern version, male and female economics students compete for the honor of "Royalty for a Day" by convincing the audience how much they are suffering because of inflation. Your teacher will provide additional information.


<table>
<thead>
<tr>
<th>2</th>
<th>GDP Components</th>
<th>Students will evaluate what components of GDP will be affected by transactions (if any), and explain how? What components of GDP (if any) would each of the following transactions affect? Explain fully your choice.</th>
<th>1 Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A family buys a new refrigerator.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Ford sells a Mustang from its inventory.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. You buy a pizza.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Your parents buy a bottle of French wine.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Honda expands its factory in Marysville, Ohio.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|   | Calculating Real vs. Nominal GDP | Students will calculate the GDP, Real and Nominal and be explain why the numbers are different. The Economy of Britannica produces three goods: Computers, DVDs, and pizza. The accompanying table shows the prices and output of the three goods for years 2008, 2009, and 2010.  
  - What is the percent change in the computer production from 2008 to 2009?  
  - What is the percent change in the price of pizza from 2009 to 2010?  
  - Calculate the nominal GDP in Britannica for 2008.  
  - Calculate the real GDP in Britannica for 2008 using 2008 as the base year.  
  - Calculate the real GDP in Britannica for 2010 using 2008 as the base year  
  *Cite: Krugman’s Macroeconomics for AP, page 117* | 30 Minutes |
|---|---|---|---|
| 3 | Standard of Living | Students will break into groups of 2. Each pair will be given randomly one of the below topics, and be prepared to debate its merits for improving the welfare of Finland.  
Which of the following policies do you think would be most effective at boosting growth and living standards in a poor country over the long run?  
  - Offer tax incentives for investment by local firms  
  - Offer tax incentives for investment by foreign firms  
  - Give cash payments for good school attendance  
  - Crackdown on government corruption  
  - Restrict imports to protect domestic industries  
  * Allow free trade  
  * Give away condoms | 1 Day |
| 3 | Productivity - The Universal Replicator | The Universal Replicator is a machine that can replicate any physical good. If a car is put into the Universal Replicator, the machine will create an exact working duplicate at the touch of a button. It will work on any non-living object. Assume this technology becomes widely adopted throughout the country by manufacturers of all types of products. Ask the class to answer the following questions. Give them time to write an answer to a question, then discuss their answers before moving to the next question.  
   - What impact would the Universal Replicator have on the economy?  
   - What jobs would not be needed?  
   - What would happen to the price of goods?  
   - What kinds of problems would you expect?  
     - What benefits do you see?  
     - What kinds of jobs would still be necessary?  
Unit 3: Financial Sector

Subject: AP Macro Economics
Grade: 11 - 12
Name of Unit: Financial Sector
Length of Unit: 3 Weeks

Overview of Unit: Students will be able to show how saving and investment are coordinated by the loanable funds market. Within the framework of the loanable funds market, we are able to see the effects of taxes and government deficits on saving, investment. We will show how people compare different sums of money at different points in time, how they manage risk.

This unit will demonstrate how money is important because the quantity of money affects inflation and interest rates in the long run, and production and employment in the short run. Students will find that, in the long run, there is a strong relationship between the growth rate of money and inflation. Students will also find that there are numerous costs to the economy from high inflation, but that there is not a consensus on the importance of these costs when inflation is moderate.

Priority Standards for unit:

● A market exists when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services (CEE- 7).

● Identify markets in which they have participated as a buyer and as a seller and describe how the interaction of all buyers and sellers influences prices. Also, predict how prices change when there is either a shortage or surplus of the product available (CEE- 7).

● Institutions evolve and are created to help individuals and groups accomplish their goals. Banks, labor unions, markets, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy (CEE- 10).

● Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses (CEE- 12).

● Explain situations in which they pay or receive interest, and explain how they would react to changes in interest rates if they were making or receiving interest payments (CEE- 12).

● There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also have direct or indirect effects on people’s incomes (CEE- 16).

● Identify and evaluate the benefits and costs of alternative public policies, and assess who enjoys the benefits and who bears the costs (CEE- 16).
• Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued (CEE-17).
• Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist (CEE-17).
• Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices (CEE - 20).
• Anticipate the impact of federal government and Federal Reserve System macroeconomic policy decisions on themselves and others CEE- 20).

Supporting Standards for unit:
• Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
  ○ Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  ○ Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
  ○ Develop cultural understanding and global awareness by engaging with learners of other cultures.
  ○ Contribute to project teams to produce original works or solve problems.
• Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
Essential Questions:
1. How is the financial system related to key macroeconomic variables?
2. Why do analysts use the loanable-funds model to analyze various government policies?
3. What is the relationship between present value and future value?
4. What is the Federal Reserve System?
5. Why does inflation result from rapid growth in the money supply?

Enduring Understanding/Big Ideas:
1. The U.S. financial system is made up of many types of financial institutions, such as the bond market, the stock market, banks, and mutual funds. All of these institutions act to direct the resources of households that want to save some of their income into the hands of households and firms who want to borrow.
2. The interest rate is determined by the supply and demand for loanable funds. The supply of loanable funds comes from households who want to save some of their income and lend it out. The demand for loanable funds comes from households and firms who want to borrow for investment. To analyze how any policy or event affects the interest rate, one must consider how it affects the supply and demand for loanable funds.
3. Because savings can earn interest, a sum of money today is more valuable than the same sum of money in the future. A person can compare sums from different times using the concept of present value. The present value of any future sum is the amount that would be needed today, given prevailing interest rates, to produce that future sum.
4. The Federal Reserve, the central bank of the United States, is responsible for regulating the U.S. monetary system. The Fed chairman is appointed by the president and confirmed by Congress every four years. The chairman is the lead member of the Federal Open Market Committee, which meets about every six weeks to consider changes in monetary policy. The Fed controls the money supply primarily through open-market operations. The purchase of government bonds increases the money supply, and the sale of government bonds decreases the money supply. The Fed can also expand the money supply by lowering reserve requirements or decreasing the discount rate, and it can contract the money supply by raising reserve requirements or increasing the discount rate.
5. The overall level of prices in an economy adjusts to bring money supply and money demand into balance. When the central bank increases the supply of money, it causes the price level to rise. Persistent growth in the quantity of money supplied leads to continuing inflation.
**Unit Vocabulary:**

<table>
<thead>
<tr>
<th>Academic Cross-Curricular Words</th>
<th>Content/Domain Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Bond</td>
<td>● Classical Dichotomy</td>
</tr>
<tr>
<td>● Budget Deficit</td>
<td>● Crowding Out</td>
</tr>
<tr>
<td>● Currency</td>
<td>● Demand Deposits</td>
</tr>
<tr>
<td>● Finance</td>
<td>● Discount Rate</td>
</tr>
<tr>
<td>● Financial Markets</td>
<td>● Efficient Market Hypothesis</td>
</tr>
<tr>
<td>● Liquidity</td>
<td>● Fed Funds Rate</td>
</tr>
<tr>
<td>● Money</td>
<td>● Fiat Money</td>
</tr>
<tr>
<td>● Mutual Fund</td>
<td>● Fisher Effect</td>
</tr>
<tr>
<td>● Risk</td>
<td>● Future Value</td>
</tr>
<tr>
<td>● Savings</td>
<td>● Loanable Funds Market</td>
</tr>
<tr>
<td>● Stock</td>
<td>● Money Neutrality</td>
</tr>
<tr>
<td>● Surplus’</td>
<td>● Money Supply</td>
</tr>
<tr>
<td></td>
<td>● National Saving</td>
</tr>
<tr>
<td></td>
<td>● Open Market Operations</td>
</tr>
<tr>
<td></td>
<td>● Present Value</td>
</tr>
<tr>
<td></td>
<td>● Quantity Equation</td>
</tr>
<tr>
<td></td>
<td>● Reserve Ratio</td>
</tr>
<tr>
<td></td>
<td>● Velocity of Money</td>
</tr>
</tbody>
</table>

**Resources for Vocabulary Development:** Principles of Economics by Mankiw, 4e; Quizlet.com; Investopedia.com
Engaging Experience 1
Title: Banks, Credit, and the Economy
Suggested Length of Time: 1-2 Days
Standards Addressed

Priority:
- Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses (CEE- 12).

Supporting:
- Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
  - Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  - Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
  - Develop cultural understanding and global awareness by engaging with learners of other cultures.
  - Contribute to project teams to produce original works or solve problems.

Detailed Description/Instructions: Students will complete the Banks, Credit, and the Economy worksheet, using the PowerPoint provided (See Appendix F-1). Students will be able to explain the impact of banks and the Federal Reserve on the money supply and the national economy. Students will identify the importance of Savings and Investment, and how changes in Interest Rates affect these. Students will also be able to explain how policymakers create currency, and how this can counteract actions of the Federal Reserve. The next day they will be prepared to discuss and debate the costs and benefits of credit and the banking industry. (See Appendix F)

Bloom’s Levels: Understand
Webb’s DOK: 4
Rubric: To be created

Engaging Experience 2
Title: Space Invaders
Suggested Length of Time: 2 Days
Standards Addressed

Priority:
- Identify markets in which they have participated as a buyer and as a seller and describe how the interaction of all buyers and sellers influences prices. Also, predict how prices change when there is either a shortage or surplus of the product available (CEE- 7).

Supporting:
● Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
  ○ Plan strategies to guide inquiry.
  ○ Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
  ○ Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
  ○ Process data and report results.

**Detailed Description/Instructions:** Students will research different financial instruments and markets, and then create a diversified portfolio based on this information. The ultimate goal will be to create an in class competition where their values can be compared throughout the term and beyond. *(See Appendix G)*

**Bloom’s Levels:** Create

**Webb’s DOK:** 4

**Rubric:** To be created

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**Engaging Experience 3**

**Title:** Time Value of Money

**Suggested Length of Time:** 30 Minutes

**Standards Addressed**

*Priority:*

- Explain situations in which they pay or receive interest, and explain how they would react to changes in interest rates if they were making or receiving interest payments

*Supporting:*

**Detailed Description/Instructions:** Students will calculate three different Investment hypotheticals to determine the best opportunity.

- Calculate the net present value of the three projects described below. Assume the current interest rate is 5%.
  - Project A: You receive an immediate payoff of $1000.00
  - Project B: You pay $100 today in order to receive $1200.00 a year from now.
  - Project C: You receive $1200 today but must pay $200.00 one year from now.

- Which of the three projects would you choose to undertake based on your net present value calculations? Explain why it is the best?

**Bloom’s Levels:** Analyze

**Webb’s DOK:** 3

**Rubric:** To be created
Engaging Experience 1

Title: How is Money Created?

Suggested Length of Time: 30 Minutes

Standards Addressed

Priority:
- There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also have direct or indirect effects on people’s incomes (CEE- 16).

Supporting:
- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).

Detailed Description/Instructions: Students will calculate and then discuss the possible outcomes to the following scenarios. Suppose the reserve requirement for checking deposits is 10 percent and that banks do no not hold any excess reserves.
- If the Fed sells 1 million in of government bonds, what is the effect on the economy’s reserves and money supply?
- Now suppose the Fed lowers the reserve requirement to 5 percent, but banks choose to hold another 5 percent of deposits as excess reserves. Why might banks do so? What is the overall change in the money multiplier and the money supply as a result of these actions?
- What would happen if the Federal Reserve anticipates the Policy Makers are going implement a stimulus plan to build roads and schools?

Bloom’s Levels: Analyze
Webb’s DOK: 2
Rubric: To be created

Engaging Experience 2

Title: Real vs. Nominal Interest Rates

Suggested Length of Time: 15 Minutes

Standards Addressed

Priority:
- Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses (CEE- 12).
• Explain situations in which they pay or receive interest, and explain how they would react to changes in interest rates if they were making or receiving interest payments (CEE-12).

Supporting:

Detailed Description/Instructions: Students will calculate borrowing $1,000.00 for one year at 5% interest to buy a couch. Although you did not anticipate any inflation there is unexpected inflation of 5% over the life of your loan:

- What is the real interest rate on your loan?
- Explain how you gained from the inflation.
- Who lost as a result of the situation described? Explain.

Bloom’s Levels: Analyze
Webb’s DOK: 3
Rubric: To be created
Engaging Experience 1

Title: Loanable Funds

Suggested Length of Time: 45 Minutes

Standards Addressed

Priority:
- Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses (CEE-12).

Supporting:
- Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).
  - Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  - Communicate information and ideas effectively to multiple audiences using a variety of media and formats.

Detailed Description/Instructions: Students will complete the Loanable Funds worksheet, below, showing the initial equilibrium, and then changes as different scenarios are presented to the model. Explain the reactions that will be adjusted for in the market by Supply and Demand.

1. Draw and label the supply and demand of loanable funds. (If you can do supply and demand for carrots, you can do this.)
2. Label the axis Real Interest Rates and Quantity of Lf. (Those things related to Prices or dollar amounts go on vertical)
3. Indicate the equilibrium RIR and Q of Lf.
4. Redraw the graph, use gently curving lines.
5. If savers save more which curve shifts?
6. Shift that curve, either left showing less at a given RIR or right indicating more at a given interest rate.
7. Indicate the new equilibrium.
8. So additional savings does what to RIR?
9. Redraw the original Lf graph using curves and show equilibrium.
10. If there is borrowing by, oh let’s say the government starts to borrow as they previously had a balanced budget and now has a deficit, which curve shifts?
11. Shift that curve, really make it move, to the left shows less for a given RIR.
12. Indicate the new equilibrium for RIR and Lf.
13. So additional borrowing does what to RIR?
14. The horizontal shift of the curve is amount of the additional borrowing by government. At the new equilibrium RIR, what change occurred in the borrowing of other entities? (This change is the Crowding Out caused by the additional government borrowing.

Bloom’s Levels: Understand

Webb’s DOK: 4; Rubric: To be created
**Engaging Experience 2**

**Title:** Crowding Out

**Suggested Length of Time:** 15 Minutes

**Standards Addressed**

**Priority:**
- Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued (CEE-17)

**Supporting:**

**Detailed Description/Instructions:** Use the loanable funds model to analyze the effects of a government budget deficit:
- Draw the diagram showing the initial equilibrium.
- Determine which curve shifts when the government runs a budget deficit.
- Draw the new curve on your diagram.
- What happens to the equilibrium values of the interest rate and investment?

**Bloom’s Levels:** Analyze

**Webb’s DOK:** 3

**Rubric:** To be created
Engaging Scenario

**Engaging Scenario** (An Engaging Scenario is a culminating activity that includes the following components: situation, challenge, specific roles, audience, product or performance.)

Released AP Microeconomic Free Response Questions and released Multiple Choice questions

**Rubric for Engaging Scenario:** College Board AP Rubric
## Summary of Engaging Learning Experiences for Topics

<table>
<thead>
<tr>
<th>Topic</th>
<th>Engaging Experience Title</th>
<th>Description</th>
<th>Suggested Length of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Banks, Credit, and the Economy</td>
<td>Students will complete the Banks, Credit, and the Economy worksheet, using the PowerPoint provided (<em>See Appendix F-1</em>). Students will be able to explain the impact of banks and the Federal Reserve on the money supply and the national economy. Students will identify the importance of Savings and Investment, and how changes in Interest Rates affect these. Students will also be able to explain how policymakers create currency, and how this can counteract actions of the Federal Reserve. The next day they will be prepared to discuss and debate the costs and benefits of credit and the banking industry. (<em>See Appendix F</em>)</td>
<td>1-2 Days</td>
</tr>
<tr>
<td>1</td>
<td>Space Invaders</td>
<td>Students will research different financial instruments and markets, and then create a diversified portfolio based on this information. The ultimate goal will be to create an in class competition where there values can be compared throughout the term and beyond. (<em>See Appendix G</em>)</td>
<td>2 Days</td>
</tr>
</tbody>
</table>
| 1     | Time Value of Money | Students will calculate three different Investment hypotheticals to determine the best opportunity.  
  ● Calculate the net present value of the three projects described below. Assume the current interest rate is 5%.  
    ○ Project A: You receive an immediate payoff of $1000.00  
    ○ Project B: You pay $100 today in order to receive $1200.00 a year from now.  
    ○ Project C: You receive $1200 today but must pay $200.00 one year from now.  
  ● Which of the three projects would you choose to undertake based on your net present value calculations? Explain why it is the best? | 30 Minutes |
| 2 | How is Money Created? | Students will calculate and then discuss the possible outcomes to the following scenarios. Suppose the reserve requirement for checking deposits is 10 percent and that banks do not hold any excess reserves.  
- If the Fed sells 1 million in of government bonds, what is the effect on the economy’s reserves and money supply?  
- Now suppose the Fed lowers the reserve requirement to 5 percent, but banks choose to hold another 5 percent of deposits as excess reserves. Why might banks do so? What is the overall change in the money multiplier and the money supply as a result of these actions?  
- What would happen if the Federal Reserve anticipates the Policy Makers are going to implement a stimulus plan to build roads and schools? | 30 Minutes |
| 2 | Real vs. Nominal Interest Rates | Students will calculate borrowing $1,000.00 for one year at 5% interest to buy a couch. Although you did not anticipate any inflation there is unexpected inflation of 5% over the life of your loan:  
- What is the real interest rate on your loan?  
- Explain how you gained from the inflation.  
- Who lost as a result of the situation described? Explain. | 15 Minutes |
| 3 | Loanable Funds | Students will complete the Loanable Funds worksheet, below, showing the initial equilibrium, and then changes as different scenarios are presented to the model. Explain the reactions that will be adjusted for in the market by Supply and Demand.  
1. Draw and label the supply and demand of loanable funds. (If you can do supply and demand for carrots, you can do this.)  
2. Label the axis Real Interest Rates and Quantity of Lf. (Those things related to Prices or dollar amounts go on vertical) | 45 Minutes |
3. Indicate the equilibrium RIR and Q of Lf.
4. Redraw the graph, use gently curving lines.
5. If savers save more which curve shifts?
6. Shift that curve either left showing less at a given RIR or right indicating more at a given interest rate.
7. Indicate the new equilibrium.
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11. Shift that curve, really make it move, to the left shows less for a given RIR.
12. Indicate the new equilibrium for RIR and Lf.
13. So additional borrowing does what to RIR?
14. The horizontal shift of the curve is amount of the additional borrowing by government. At the new equilibrium RIR, what change occurred in the borrowing of other entities? (This change is the Crowding Out caused by the additional government borrowing.)

| 3 | Crowding Out | Use the loanable funds model to analyze the effects of a government budget deficit:
  |   |   | - Draw the diagram showing the initial equilibrium.
  |   |   | - Determine which curve shifts when the government runs a budget deficit.
  |   |   | - Draw the new curve on your diagram.
  |   |   | - What happens to the equilibrium values of the interest rate and investment? | 15 Minutes |
Unit 4: National Income, Price Determination, and International Trade

Subject: AP Macro Economics
Grade: 11 - 12
Name of Unit: National Income, Price Determination and International Trade
Length of Unit: 3 Weeks
Overview of Unit: Students will demonstrate that the welfare economies benefit from trade. Because there are gains from trade, restrictions on free trade reduce the gains from trade and cause deadweight losses similar to those generated by a tax. This will also addresses why a nation’s net exports must equal its net capital outflow. There is also a relationships between the prices and quantities in the market for loanable funds and the prices and quantities in the market for foreign-currency exchange. Students will finally learn about some of the sources for shifts in the aggregate-demand curve and the aggregate-supply curve and how these shifts can cause recessions.

Priority Standards for unit:
- Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations (CEE-5).
- Explain how their lives would be more difficult in a world with no money, or in a world where money sharply lost its value (CEE-12).
- Income for most people is determined by the market value of the productive resources they sell. What workers earn primarily depends on the market value of what they produce (CEE-13).
- Investment in factories, machinery, new technology, and in the health, education, and training of people stimulates economic growth and can raise future standards of living (CEE-15).
- Predict the consequences of investment decisions made by individuals, businesses, and governments. (CEE-15)
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE-18).
- Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers (CEE0 18).
- Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices (CEE-20).
- Anticipate the impact of federal government and Federal Reserve System macroeconomic policy decisions on themselves and others (CEE-20).
Supporting Standards for unit:

- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources (ISTE 4 - Critical Thinking, Problem Solving, and Decision Making).
**Essential Questions:**
1. Why is saving, domestic investment, and net capital outflow related?
2. Why are models used to explain an open economy’s trade balance and exchange rate?
3. Why do Economists use the model of aggregate demand and aggregate supply to explain economic fluctuations?
4. Why do shifts in either aggregate demand or aggregate supply can cause booms and recessions?

*Cite: Mankiw, N. Gregory, Principles of Economics, 4th Ed. Ohio: Thomson South-Western, 2007*

**Enduring Understanding/Big Ideas:**
1. An economy’s saving can be used to finance investment at home or buy assets abroad. Thus, national saving equals domestic investment plus net capital outflow. The nominal exchange rate is the relative price of the currency of two countries, and the real exchange rate is the relative price of the goods and services of two countries. When the nominal exchange rate changes so that each dollar buys more foreign currency, the dollar is said to *appreciate* or *strengthen*. When the nominal exchange rate changes so that each dollar buys less foreign currency, the dollar is said to *depreciate* or *weaken*.

2. To analyze the macroeconomics of open economies, two markets are central—the market for loanable funds and the market for foreign-currency exchange. In the market for loanable funds, the real interest rate adjusts to balance the supply of loanable funds (from national saving) and the demand for loanable funds (from domestic investment and net capital outflow). In the market for foreign-currency exchange, the real exchange rate adjusts to balance the supply of dollars (from net capital outflow) and the demand for dollars (for net exports). Because net capital outflow is part of the demand for loanable funds and because it provides the supply of dollars for foreign-currency exchange, it is the variable that connects these two markets.

3. The aggregate-demand curve slopes downward for three reasons. The first is the wealth effect: A lower price level raises the real value of households’ money holdings, which stimulates consumer spending. The second is the interest-rate effect: A lower price level reduces the quantity of money households’ demand; as households try to convert money into interest-bearing assets, interest rates fall, which stimulates investment spending. The third is the exchange-rate effect: As a lower price level reduces interest rates, the dollar depreciates in the market for foreign-currency exchange, which stimulates net exports. Any event or policy that raises consumption, investment, government purchases, or net exports at a given price level increases aggregate demand. Any event or policy that reduces consumption, investment, government purchases, or net exports at a given price level decreases aggregate demand.

4. All societies experience short-run economic fluctuations around long-run trends. These fluctuations are irregular and largely unpredictable. When recessions do occur, real GDP and other measures of income, spending, and production fall, and unemployment rises.
### Unit Vocabulary:

<table>
<thead>
<tr>
<th>Academic Cross-Curricular Words</th>
<th>Content/Domain Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Appreciation</td>
<td>● Aggregate Demand</td>
</tr>
<tr>
<td>● Closed Economy</td>
<td>● Aggregate Supply</td>
</tr>
<tr>
<td>● Depreciation</td>
<td>● Capital Flight</td>
</tr>
<tr>
<td>● Depression</td>
<td>● National Exchange Rate</td>
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<tr>
<td>● Exports</td>
<td>● Net Capital Outflow</td>
</tr>
<tr>
<td>● Imports</td>
<td>● Purchasing Power Parity</td>
</tr>
<tr>
<td>● Recession</td>
<td>● Stagflation</td>
</tr>
<tr>
<td>● Tariff</td>
<td>● Trade Balance</td>
</tr>
<tr>
<td></td>
<td>● Trade Policy</td>
</tr>
</tbody>
</table>

**Resources for Vocabulary Development:** Principles of Economics by Mankiw, 4e; Quizlet.com; Investopedia.com
Engaging Experience 1
Title: Short Run Aggregate Supply
Suggested Length of Time: 20-25 Minutes
Standards Addressed

Priority:
- Income for most people is determined by the market value of the productive resources they sell. What workers earn primarily depends on the market value of what they produce (CEE- 13).

Supporting:
- Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices (CEE- 20)
- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).

Detailed Description/Instructions: Students will evaluate different events in the economy and how they affect the Short Run Aggregate Supply for different economic systems. In the second activity students show and analyze what situations cause shifts in the Curve. See Appendix H

Bloom’s Levels: Apply
Webb’s DOK: 3
Rubric: To be created

Engaging Experience 2
Title: Aggregate Demand
Suggested Length of Time: 20 Minutes
Standards Addressed

Priority:
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE- 18).

Supporting:
- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).

Detailed Description/Instructions: Students will research the period of the Great Depression and WW II, to see the Economic conditions. They will then complete the Aggregate Demand assignment (see Appendix I), to show their understanding of the conditions at that time, and how the shifts in AD occurred.

Bloom’s Levels: Evaluate
Webb’s DOK: 3; Rubric: To be created
Engaging Experience 3
Title: Long Run Aggregate Supply
Suggested Length of Time: 1 Day
Standards Addressed

Priority:
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE- 18).

Supporting:
- Predict the consequences of investment decisions made by individuals, businesses, and governments. (CEE- 15)

Detailed Description/Instructions: Students will draw LRAS for:
   A.) Draw a correctly labeled graph illustrating a Long Run Aggregate Supply Curve.
   B) On your graph from part A, label potential output.
   C) On your graph from part A, illustrate an increase in LRAS.
   D) What would have caused the change you illustrated in Part C? List three possible causes and explain.

To show how in the Long Run economies moves back to Full Employment albeit at possibly different price levels.

Bloom’s Levels: Understand
Webb’s DOK: 4
Rubric: To be created
Engaging Experience 1
Title: Balance of Payments
Suggested Length of Time: 25 - 30 Minutes
Standards Addressed

Priority:
- Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations (CEE-5).

Supporting:
Detailed Description/Instructions: Students will analyze the components of the Capital Account and Current Account, and identify whether the Country is in Deficit or Surplus. They will use their completed table from (Appendix J) to make recommendations to how the nation should react to these conditions.
Bloom’s Levels: Analyze
Webb’s DOK: 4
Rubric: To be created

Engaging Experience 2
Title: International Trade
Suggested Length of Time: 30 Minutes
Standards Addressed

Priority:
- Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations (CEE-5).

Supporting:
Detailed Description/Instructions: The students will demonstrate graphically how nations are better off economically by engaging in Trade. See Appendix K - International Trade
Bloom’s Levels: Apply
Webb’s DOK: 4
Rubric: To be created

Engaging Experience 3
Title: Cartels and Collusions
Suggested Length of Time: 1 Day
Standards Addressed

Priority:
• Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers (CEE0 18).

Supporting:
• Predict the consequences of investment decisions made by individuals, businesses, and governments. (CEE- 15)
• Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources (ISTE 4 - Critical Thinking, Problem Solving, and Decision Making).

Detailed Description/Instructions: Students will engage in a Class Activity (See Appendix L - Cartels), that will show how self-interest and the profit motive, prevents Cartels from dominating markets.

Bloom’s Levels: Evaluate
Webb’s DOK: 4
Rubric: Class Discussion
**Topic 3: Foreign Exchange Market**

**Engaging Experience 1**

**Title:** Foreign Exchange Markets - Floating

**Suggested Length of Time:** 30 Minutes

**Standards Addressed**

**Priority:**
- Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices (CEE- 20).

**Supporting:**

**Detailed Description/Instructions:** Students will be able to complete the below Free Response showing the relationship of currencies between nations.

Suppose the United States and Australia were the only two countries in the world, and that both countries pursued a floating exchange rate regime. Note that the currency in Australia is the Australian dollar.

- Draw a correctly labeled graph showing equilibrium in the foreign exchange market for U.S. dollars.
- If the Federal Reserve pursues expansionary monetary policy what will happen to the US Interest rate and the International capital flows? Explain.
- On your graph of the foreign exchange market. Illustrate the effect of the Fed’s policy on the supply of U.S. dollars, and, the demand for US dollars, and the equilibrium exchange rate.

**Bloom’s Levels:** Apply

**Webb’s DOK:** 4

**Rubric:** To be created

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**Engaging Experience 2**

**Title:** Foreign Exchange Markets - Fixed

**Suggested Length of Time:** 15- 20 Minutes

**Standards Addressed**

**Priority:**
- Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices (CEE- 20).

**Supporting:**

**Detailed Description/Instructions:** Students will be able to complete the Free Response Question showing the relationship of currencies between nations.

Suppose the United States and India were the only two countries in the world.

- Draw a correctly labeled graph of the foreign exchange market for U.S. dollars, showing equilibrium in the market.
• On the graph indicate a fixed exchange rate set about the equilibrium exchange rate. Does the fixed exchange rate lead to a surplus or shortage of US dollars? Explain and show the amount of the surplus/shortage on your graph.
• To bring the foreign exchange market back to an equilibrium at the fixed exchange rate, would US government need to buy or sell dollars? On your graph, illustrate how the government’s’ buying or selling of dollars would bring the equilibrium exchange rate back to the desire fixed rate.

Bloom’s Levels: Apply
Webb’s DOK: 3
Rubric: To be created
Engaging Scenario

**Engaging Scenario** (An Engaging Scenario is a culminating activity that includes the following components: situation, challenge, specific roles, audience, product or performance.)

Released AP Microeconomic Free Response Questions and released Multiple Choice questions

**Rubric for Engaging Scenario:** College Board AP Rubric
<table>
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<tr>
<th>Topic</th>
<th>Engaging Experience Title</th>
<th>Description</th>
<th>Suggested Length of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Short Run Aggregate Supply</td>
<td>Students will evaluate different events in the economy and how they affect the Short Run Aggregate Supply for different economic systems. In the second activity students show and analyze what situations cause shifts in the Curve. <em>See Appendix H</em></td>
<td>20-25 Minutes</td>
</tr>
<tr>
<td>1</td>
<td>Aggregate Demand</td>
<td>Students will research the period of the Great Depression and WW II, to see the Economic conditions. They will then complete the Aggregate Demand assignment (<em>see Appendix I</em>), to show their understanding of the conditions at that time, and how the shifts in AD occurred.</td>
<td>20 Minutes</td>
</tr>
</tbody>
</table>
| 1     | Long Run Aggregate Supply | Students will draw LRAS for:  
  - Draw a correctly labeled graph illustrating a Long Run Aggregate Supply Curve.  
  - On your graph from part A, label potential output.  
  - On your graph from part A, illustrate an increase in LRAS.  
  - What would have caused the change you illustrated in Part C? List three possible causes and explain.  
  To show how in the Long Run economies moves back to Full Employment albeit at possibly different price levels. | 1 Day |
<p>| 2     | Balance of Payments       | Students will Analyze the components of the Capital Account and Current Account, and identify whether the Country is in Deficit or Surplus. They will use their completed table from (<em>Appendix J</em>) to make recommendations to how the nation should react to these conditions. | 25 - 30 Minutes |
| 2     | International Trade       | The students will demonstrate graphically how nations are better off economically by engaging in Trade. <em>See Appendix K - International Trade</em> | 30 Minutes |</p>
<table>
<thead>
<tr>
<th>2</th>
<th>Cartels and Collusions</th>
<th>Students will engage in a Class Activity <em>(See Appendix L - Cartels)</em>, that will show how self-interest and the profit motive, prevents Cartels from dominating markets.</th>
<th>1 Day</th>
</tr>
</thead>
</table>
| 3 | Foreign Exchange Markets - Floating | Students will be able to complete the below Free Response showing the relationship of currencies between nations. Suppose the United States and Australia were the only two countries in the world, and that both countries pursued a floating exchange rate regime. Note that the currency in Australia is the Australian dollar.  
- Draw a correctly labeled graph showing equilibrium in the foreign exchange market for U.S. dollars.  
- If the Federal Reserve pursues expansionary monetary policy what will happen to the US Interest rate and the International capital flows? Explain.  
- On your graph of the foreign exchange market. Illustrate the effect of the Fed’s policy on the supply of U.S. dollars, and, the demand for US dollars, and the equilibrium exchange rate.  
- How does the Fed’s monetary policy affect US aggregate demand? Explain. | 30 Minutes |
| 3 | Foreign Exchange Markets - Fixed | Students will be able to complete the Free Response Question showing the relationship of currencies between nations. Suppose the United States and India were the only two countries in the world.  
- Draw a correctly labeled graph of the foreign exchange market for U.S. dollars, showing equilibrium in the market.  
- On the graph indicate a fixed exchange rate set about the equilibrium exchange rate. Does the fixed exchange rate lead to a surplus or shortage of US dollars? Explain and show the amount of the surplus/shortage on your graph.  
- To bring the foreign exchange market back to an equilibrium at the fixed exchange rate, would US government need to buy or sell dollars? On your graph, illustrate how the | 15-20 Minutes |
government’s’ buying or selling of dollars would bring the equilibrium exchange rate back to the desired fixed rate.
Subject: AP Macro Economics  
Grade: 11 - 12  
Name of Unit: Stabilization Policies and Economic Growth  
Length of Unit: 3 Weeks  
Overview of Unit: Policymakers sometimes try to offset inflation and unemployment by shifting aggregate demand with monetary and fiscal policy. Students will address the theory behind these policies and some of the shortcomings of stabilization policy. There is a temporary trade-off between inflation and unemployment, and why is there no permanent trade-off. This result is an extension of the results produced by the model of aggregate supply and aggregate demand where a change in the price level induced by a change in aggregate demand temporarily alters output but has no permanent impact on output. Finally students will debate both sides of five leading debates over macroeconomic policy, or, at least, it may help them understand the reasoning of others who have taken a position.  
Priority Standards for unit:  
- There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also have direct or indirect effects on people’s incomes (CEE-16).  
- Identify and evaluate the benefits and costs of alternative public policies, and assess who enjoys the benefits and who bears the costs (CEE- 16).  
- Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued (CEE- 17).  
- Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist (CEE- 17).  
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE- 18).  
- Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers (CEE- 18).  
- Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices (CEE - 20).  
- Anticipate the impact of federal government and Federal Reserve System macroeconomic policy decisions on themselves and others (CEE - 20).  
Supporting Standards for unit:  
- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology (ISTE 1 - Creativity and Innovation).
● Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others (ISTE 2 - Communication and Collaboration).

● Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
  ○ Plan strategies to guide inquiry.
  ○ Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
  ○ Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

● Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources (ISTE 4 - Critical Thinking, Problem Solving, and Decision Making).

● Students demonstrate a sound understanding of technology concepts, systems, and operations (ISTE 6 - Technology Operations and Concepts).
  ○ Understand and use technology systems.
  ○ Select and use applications effectively and productively.
  ○Troubleshoot systems and applications.
**Essential Questions:**
1. Why do fiscal and monetary policy affect interest rates and aggregate demand?
2. Why do policymakers face a short-run trade-off between inflation and unemployment?
3. What are the current debates in Macroeconomic Policy?

**Enduring Understanding/Big Ideas:**
1. Policymakers can influence aggregate demand with monetary policy. An increase in the money supply reduces the equilibrium interest rate for any given price level. Because a lower interest rate stimulates investment spending, the aggregate-demand curve shifts to the right. Conversely, a decrease in the money supply raises the equilibrium interest rate for any given price level and shifts the aggregate-demand curve to the left. Policymakers can also influence aggregate demand with fiscal policy. An increase in government purchases or a cut in taxes shifts the aggregate-demand curve to the right. A decrease in government purchases or an increase in taxes shifts the aggregate-demand curve to the left. When the government alters spending or taxes, the resulting shift in aggregate demand can be larger or smaller than the fiscal change. The multiplier effect tends to amplify the effects of fiscal policy on aggregate demand. The crowding-out effect tends to dampen the effects of fiscal policy on aggregate demand.

2. The Phillips curve describes a negative relationship between inflation and unemployment. By expanding aggregate demand, policy makers can choose a point on the Phillips curve with higher inflation and lower unemployment. By contracting aggregate demand, policy makers can choose a point on the Phillips curve with lower inflation and higher unemployment. The trade-off between inflation and unemployment described by the Phillips curve holds only in the short run. In the long run, expected inflation adjusts to changes in actual inflation, and the short-run Phillips curve shifts. As a result, the long-run Phillips curve is vertical at the natural rate of unemployment. The short-run Phillips curve also shifts because of shocks to aggregate supply. An adverse supply shock, such as an increase in world oil prices, gives policymakers a less favorable trade-off between inflation and unemployment. That is, after an adverse supply shock, policymakers have to accept a higher rate of inflation for any given rate of unemployment, or a higher rate of unemployment for any given rate of inflation.

3. Advocates of active monetary and fiscal policy view the economy as inherently unstable and believe that policy can manage aggregate demand in order to offset the inherent instability. Critics of active monetary and fiscal policy emphasize that policy affects the economy with a lag and that our ability to forecast future economic conditions is poor. As a result, attempts to stabilize the economy can end up being destabilizing.

*Cite: Mankiw, N. Gregory, Principles of Economics, 4th Ed. Ohio: Thomson South-Western, 2007*
### Unit Vocabulary:

<table>
<thead>
<tr>
<th>Academic Cross-Curricular Words</th>
<th>Content/Domain Specific</th>
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<tbody>
<tr>
<td>● fiscal policy</td>
<td>● Automatic Stabilizers</td>
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<tr>
<td>● Inflation</td>
<td>● Crowding out effect</td>
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<tr>
<td>● Unemployment</td>
<td>● Liquidity preference theory</td>
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<tr>
<td></td>
<td>● Multiplier Effect</td>
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<td></td>
<td>● Natural Rate of Unemployment</td>
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<td></td>
<td>● Phillips Curve</td>
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<td>● Rational Expectations</td>
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<td>● Supply Shocks</td>
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</tbody>
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**Resources for Vocabulary Development:** Principles of Economics by Mankiw, 4e; Quizlet.com; Investopedia.com
Topic 1: Phillips Curve

Engaging Experience 1
Title: Phillips Curve Analysis and Application
Suggested Length of Time: 45-60 Minutes
Standards Addressed

Priority:
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE- 18).

Supporting:
Detailed Description/Instructions: This lesson, uses data from the 1960's to recreate the original Phillips Curve. The lesson shows the unemployment and inflation data from 1960 through 1970 that lead policymakers to conclude that there was a trade-off between inflation and unemployment. You will learn how (1) wage setters began to anticipate inflation and build these expectations into their wage demands;(2) read the graph and predict what will happen to prices and wages when unemployment falls; and (3) analyze real data and interpret policy on wages and prices. When economists analyze the unemployment rate, this model is used to make predictions and create policy. After this lesson, you can call yourself an economist! See Appendix M 1-6

Have a discussion with classmates based on the following statements. "Before 1960, the inflation rate was sometimes positive and sometimes negative. In the 1960s this changed and inflation was always positive so that workers expected an increase in the price level. What do you think happened to wages in the 60s?" If the president thinks that the unemployment rate should be 4 percent, what would you say?

Bloom’s Levels: Evaluate
Webb’s DOK: Level 4
Rubric: To be created

Engaging Experience 2
Title: Extended Reading Documents (Phillip’s Curve)
Suggested Length of Time: 20-30 Minutes
Standards Addressed

Priority:
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE- 18).

Supporting:
- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).

Detailed Description/Instructions: Students will independently read about the Phillip’s Curve, Long-Run and Short-Run components. The teacher will then lead a large group discussion regarding the different characteristics of each component. See Appendix N.

Bloom’s Levels: Understand; Webb’s DOK: level 3; Rubric: Class participation
**Engaging Experience 1**

**Title:** To Continue Stimulus or To Pursue Austerity?

**Suggested Length of Time:** 45-60 Minutes

**Standards Addressed**

*Priority:*
- Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers (CEE- 18).

*Supporting:*
- Students apply digital tools to gather, evaluate, and use information (ISTE 3 - Research and Information Fluency).
  - Plan strategies to guide inquiry.
  - Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
  - Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

**Detailed Description/Instructions:** Students will research the two sides of the debate of the role of the government in macroeconomics. The two main sides are those that think governments of developed economies have not done enough to get their economies out of recession and those that believe they have done too much. Students will pick a side of which they believe to be the truth.

Students will then watch the videos below, which show the leading intellectuals on both sides of the stimulus/austerity debate presenting their arguments. Below each video are discussion questions to help guide your understanding of their views. Students will watch the videos and respond to the discussion questions in the comment section below taking into account their prior research.

- **Video 1 – Krugman argues for continued stimulus:**
  https://www.youtube.com/watch?feature=player_embedded&v=7-pndXGafUg

  **Discussion Questions:**
  1. What are the two “profoundly different views of economics” that are being tested as governments begin rolling back the fiscal stimulus packages of the last two years?
  2. What are three characteristics of an economy in a “depression” according to Krugman?
  3. What is “budget austerity” and why does Krugman think this should not be the first priority of policymakers in the G20 nations?
  4. Why is deflation dangerous according to Krugman?
  5. What is the additional annual cost to the US government of borrowing and spending an additional trillion dollars now? What is the potential additional benefit of more stimulus?

- **Video 2 – Ferguson argues for austerity and “fiscal regime change”:**
  https://www.youtube.com/watch?feature=player_embedded&v=03CB8pVJkI8

  **Discussion Questions:**
  1. Why might the US have to pass spending cuts and tax increases to maintain its “credibility in international bond markets”?
  2. Why would fiscal tightening “choke off the recovery”?
3. How is the financial crisis in Europe a warning to the US?
4. How could the “costs” exceed the “benefits” of deficit financed expansionary fiscal policy?
5. Ferguson proposes a new type of policy that “boosts confidence”. Why will expansionary fiscal and monetary policies fail if private sector confidence remains depressed?

Cite: This post was originally published in August of 2010. It is being reposted to support a lesson on fiscal policy.

Bloom’s Levels: Evaluate
Webb’s DOK: Level 4
Rubric: To be created

Engaging Experience 2
Title: Politics and Policy
Suggested Length of Time: 1 Day

Standards Addressed
Priority:
- Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices (CEE - 20).

Supporting:
Detailed Description/Instructions: This assignment asks students to analyze a policy proposal or campaign promise from an economic perspective. Aggregate demand/aggregate supply analysis lets students consider the macroeconomic implications of political promises. Students will:
- Find a current political proposal that would have economic implications. This can be a campaign promise by a candidate or a policy proposal by an officeholder.
- Name the politician and briefly describe the proposal.
- Consider the economic implications of this proposal. Is it more likely to affect aggregate demand or aggregate supply? Explain how this proposal would change the AD curve—through consumption, investment, government spending, or net exports—or the AS curve—through labor, capital, natural resources, or technology.
- Graph the impact of this proposal using aggregate demand and aggregate supply. Explain what happens to the price level and the level of output.
- Does this policy seem to be appropriate given the current economic conditions? Explain.

Bloom’s Levels: Evaluate
Webb’s DOK: 4
Rubric: To be created
Engaging Experience 1

Title: National Debt

Suggested Length of Time: 45-60 Minutes

Standards Addressed

Priority:
- Fluctuations in a nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline (CEE- 18).

Supporting:
- Students demonstrate a sound understanding of technology concepts, systems, and operations (ISTE 6 - Technology Operations and Concepts).
  - Understand and use technology systems.
  - Select and use applications effectively and productively.
  - Troubleshoot systems and applications.

Detailed Description/Instructions: Read the following article and watch the video links. Use the information to provide answers demonstrating your learned knowledge of National debt.

- Articles:
  - *A theory of fiscal policy: Self-sustaining stimulus* | The Economist
    http://www.economist.com/node/21551069/print
  - *A Closer Look at the Crowding-out Effect*:

- Videos:
  - The crowding-out effect of fiscal policy is explained in detail in the following video from *The Economics Classroom*:  https://youtu.be/mwjvutjDhOw
  - The multiplier effect is explained in detail in the following video lesson:  https://youtu.be/IWGt-CSnXc8

The teacher will facilitate a large group discussion based on the below guiding questions:

- Why is crowding-out more likely to occur when an economy is already producing at or near its full employment level of output than when an economy is in recession?
- How are the theories of *crowding-out* and the *multiplier effect* used to argue for two different sides in the debate over the use of expansionary fiscal policy?
- Why might a government deficit, paid for with borrowed money, lead to an expectation of a future increase in taxes?
- Do you believe the government should take action during periods of economic hardship, or should it just get out of the way and let the economy “correct itself”?

Bloom’s Levels: Evaluate
Webb’s DOK: 4
Rubric: To be created
Engaging Experience 2
Title: Budget Planning
Suggested Length of Time: 15-30 Minutes
Standards Addressed

Priority:
- Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued (CEE-17).

Supporting:

Detailed Description/Instructions: Try to cut $1.345 trillion from the 2030 budget. Why 2030? That’s when boomers start to weigh heavily on the budget, and it’s the latest year for which experts have estimated costs for budget items. Each square (💰) in the big grid below represents $1 billion. Your job is to fill in these squares by choosing from our menu of spending cuts and tax hikes. What is the opportunity of the cuts you have made? Be prepared to debate the merits of your decisions with your classmates. See Appendix O

Bloom’s Levels: Apply
Webb’s DOK: 3
Rubric: Class participation
Engaging Scenario

Engaging Scenario (An Engaging Scenario is a culminating activity that includes the following components: situation, challenge, specific roles, audience, product or performance.)

Released AP Microeconomic Free Response Questions and released Multiple Choice questions

Rubric for Engaging Scenario: College Board AP Rubric
# Summary of Engaging Learning Experiences for Topics

<table>
<thead>
<tr>
<th>Topic</th>
<th>Engaging Experience Title</th>
<th>Description</th>
<th>Suggested Length of Time</th>
</tr>
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</table>
| 1     | Phillips Curve Analysis and Application | This lesson, uses data from the 1960's to recreate the original Phillips Curve. The lesson shows the unemployment and inflation data from 1960 through 1970 that lead policymakers to conclude that there was a trade-off between inflation and unemployment. You will learn how (1) wage setters began to anticipate inflation and build these expectations into their wage demands;(2) read the graph and predict what will happen to prices and wages when unemployment falls; and (3) analyze real data and interpret policy on wages and prices. When economists analyze the unemployment rate, this model is used to make predictions and create policy. After this lesson, you can call yourself an economist! *See Appendix M 1-6*  
Have a discussion with classmates based on the following statements. "Before 1960, the inflation rate was sometimes positive and sometimes negative. In the 1960s this changed and inflation was always positive so that workers expected an increase in the price level. What do you think happened to wages in the 60s?" If the president thinks that the unemployment rate should be 4 percent, what would you say? | 45-60 Minutes |
| 1     | Extended Reading Documents (Phillip’s Curve) | Students will independently read about the Phillip’s Curve, Long-Run and Short-Run components. The teacher will then lead a large group discussion regarding the different characteristics of each component. *See Appendix N.* | 20-30 Minutes |
| 2     | To Continue Stimulus or To Pursue Austerity? | Students will research the two sides of the debate of the role of the government in macroeconomics. The two main sides are those that think governments of developed economies have not done enough to get their economies out of recession and those that believe they have done too much. Students will pick a side of which they believe to be the truth. | 45-60 Minutes |
Students will then watch the videos below, which show the leading intellectuals on both sides of the stimulus/austerity debate presenting their arguments. Below each video are discussion questions to help guide your understanding of their views. Students will watch the videos and respond to the discussion questions in the comment section below taking into account their prior research. 

*Cite: This post was originally published in August of 2010. It is being reposted to support a lesson on fiscal policy.*

| 2 | Politics and Policy | This assignment asks students to analyze a policy proposal or campaign promise from an economic perspective. Aggregate demand/aggregate supply analysis lets students consider the macroeconomic implications of political promises. Students will:  
- Find a current political proposal that would have economic implications. This can be a campaign promise by a candidate or a policy proposal by an officeholder.  
- Name the politician and briefly describe the proposal.  
- Consider the economic implications of this proposal. Is it more likely to affect aggregate demand or aggregate supply? Explain how this proposal would change the AD curve—through consumption, investment, government spending, or net exports—or the AS curve—through labor, capital, natural resources, or technology.  
- Graph the impact of this proposal using aggregate demand and aggregate supply. Explain what happens to the price level and the level of output.  
- Does this policy seem to be appropriate given the current economic conditions? Explain. | 1 Day |

| 3 | National Debt | Read the following article and watch the video links. Use the information to provide answers demonstrating your learned knowledge of National debt.  
- Articles:  
  - *A theory of fiscal policy: Self-sustaining stimulus* | The Economist | 45-60 Minutes |
### Videos:

- **Crowding-out effect** of fiscal policy is explained in detail in the following video from *The Economics Classroom*:  
  [https://youtu.be/mwjvutjDhOw](https://youtu.be/mwjvutjDhOw)

- The multiplier effect is explained in detail in the following video lesson:  
  [https://youtu.be/IWGt-CSnXc8](https://youtu.be/IWGt-CSnXc8)

The teacher will facilitate a large group discussion based on the below guiding questions:

- Why is crowding-out more likely to occur when an economy is already producing at or near its full employment level of output than when an economy is in recession?
- How are the theories of crowding-out and the *multiplier effect* used to argue for two different sides in the debate over the use of expansionary fiscal policy?
- Why might a government deficit, paid for with borrowed money, lead to an expectation of a future increase in taxes?
- Do you believe the government should take action during periods of economic hardship, or should it just get out of the way and let the economy “correct itself”?

### Budget Planning

Try to cut $1,345 trillion from the 2030 budget. Why 2030? That’s when boomers start to weigh heavily on the budget, and it’s the latest year for which experts have estimated costs for budget items. Each square (⬜) in the big grid below represents $1 billion. Your job is to fill in these squares by choosing from our menu of spending cuts and tax hikes. What is the opportunity of the cuts you have made? Be prepared to debate the merits of your decisions with your classmates. See Appendix “O”
**Unit of Study Terminology**

**Appendices:** All Appendices and supporting material can be found in this course’s shell course in the District’s Learning Management System.

**Assessment Leveling Guide:** A tool to use when writing assessments in order to maintain the appropriate level of rigor that matches the standard.

**Big Ideas/Enduring Understandings:** Foundational understandings teachers want students to be able to discover and state in their own words by the end of the unit of study. These are answers to the essential questions.

**Engaging Experience:** Each topic is broken into a list of engaging experiences for students. These experiences are aligned to priority and supporting standards, thus stating what students should be able to do. An example of an engaging experience is provided in the description, but a teacher has the autonomy to substitute one of their own that aligns to the level of rigor stated in the standards.

**Engaging Scenario:** This is a culminating activity in which students are given a role, situation, challenge, audience, and a product or performance is specified. Each unit contains an example of an engaging scenario, but a teacher has the ability to substitute with the same intent in mind.

**Essential Questions:** Engaging, open-ended questions that teachers can use to engage students in the learning.

**Priority Standards:** What every student should know and be able to do. These were chosen because of their necessity for success in the next course, the state assessment, and life.

**Supporting Standards:** Additional standards that support the learning within the unit.

**Topic:** These are the main teaching points for the unit. Units can have anywhere from one topic to many, depending on the depth of the unit.

**Unit of Study:** Series of learning experiences/related assessments based on designated priority standards and related supporting standards.

**Unit Vocabulary:** Words students will encounter within the unit that are essential to understanding. Academic Cross-Curricular words (also called Tier 2 words) are those that can be found in multiple content areas, not just this one. Content/Domain Specific vocabulary words are those found specifically within the content.

**Symbols:**

- ![Symbol](image) This symbol depicts an experience that can be used to assess a student’s 21st Century Skills using the rubric provided by the district.

- ![Symbol](image) This symbol depicts an experience that integrates professional skills, the development of professional communication, and/or the use of professional mentorships in authentic classroom learning activities.