Applying

Objectives:
Diagram the relationship among a final good or service, the way it's produced, and who consumes and produces it.
Define capital goods as goods that are produced and used to make other goods and services.
Compare market value of different goods and services.

Exploration:

A. Building a Peanut Butter and Jelly Sandwich

Have students create a list of resources needed to build a peanut butter and jelly sandwich. Encourage students to break down the natural resources into its simplest form.

<table>
<thead>
<tr>
<th>Building a Peanut Butter and Jelly Sandwich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources (Possible answers: wheat and flour to make bread, peanuts and oil to make peanut butter, fruit and sugar to make jelly)</td>
</tr>
<tr>
<td>Human Resources (Possible answers: Sandwich maker= mom, dad, student, teacher)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capital Goods/Capital Resources - tools, machines used in production</th>
<th>Intermediate Goods - goods that are used up during production</th>
</tr>
</thead>
<tbody>
<tr>
<td>knife, jar, plate, spoon</td>
<td>peanut butter, bread, jelly</td>
</tr>
</tbody>
</table>

B. Peanut Butter and Jelly Sandwich Business

Explain to the students that they are opening a business that sells peanut butter and jelly sandwiches. This means they will be making a higher volume of sandwiches and selling it from their place of business. They will have to consider the number of goods needed to produce their good and what kinds of services they will need outside of their business to help make and sell their good.

They also have to consider what natural (what natural resources will be needed to produce goods), human (what types of people will you need to have your business run smoothly), capital goods (what tools and equipment will you need to produce your good), and what intermediate goods (goods that are used up during production) they will need to satisfy a large number of consumers.

In order for your business to be successful, you must know the goods or services you are producing, how it is produced, and who will consume your goods or services.

Show the flip chart for Goods and Services Chain of Production. Have students complete the
Goods and Services Chain of Production. Students will fill in each oval or chain using the example with guiding questions.

1. What is being produced?
2. What goods are used to produce your good or service?
3. What services will be used to produce your good or service?
4. How will your good be produced?
5. Who is my consumer? How can I increase my consumers?

Possible answers:
1) Peanut Butter and Jelly Sandwiches,
2) bread, jelly, peanut butter, plates, knives, spoons, counter space, jars
3) Professional sandwich makers (line cooks), cashier to sell your goods, drivers to deliver goods, advertising agent to advertise your business
4) Bread will be produced by bread companies and will be delivered to the business, oil and peanuts will be blended together to make peanut butter, fruit and sugar will be used to make jelly. Line cooks will make sandwiches using tools such as counter space knives, spoons, and plates to put ingredients together. They will package the sandwich and the cashier will sell the sandwiches.
5) The consumers are kids, adults, people who love peanut butter and jelly sandwiches, people on the go who want a healthy simple meal.
I can increase my consumers by using advertisements to inform the public about the business and what we sell.
6) Wheat, flour to make bread, oil and peanuts to make peanut butter, and fruit and sugar to make jelly
7) Sandwich maker, cashier, delivery driver, advertising agent
8) Knives, spoons, mixer, jars, counter space

C. Market Value of Goods and Services
Explain to students that their peanut butter and jelly sandwich business is doing well. Their business is looking to expand and use different fruits to create different jellies. Cost of the fruit is a factor in purchasing that good (fruit) and students should compare the prices of fruits to determine what to buy.

The market value of a good or service is determined by the price of the good or service. The higher the price of the good or service, the higher the market value. The lower the price of the good or service, the lower the market value.

Have students look at the market value of the following fruits. The charts show the price of fruits in the summer and winter.

<table>
<thead>
<tr>
<th>FRUIT (FRESH UNLESS OTHERWISE NOTED)</th>
<th>SUMMER</th>
<th>WINTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberries</td>
<td>$2.00/lb</td>
<td>$5.00/lb</td>
</tr>
<tr>
<td>Grapes</td>
<td>$1.00/lb</td>
<td>$3.00/lb</td>
</tr>
<tr>
<td>Raspberries</td>
<td>$5.00/lb</td>
<td>$7.00/lb or $3.00/lb frozen</td>
</tr>
<tr>
<td>Peaches</td>
<td>$2.00/lb</td>
<td>$5.00/lb</td>
</tr>
<tr>
<td>Blueberries</td>
<td>$5.00/lb</td>
<td>$7.00/lb or $4.00/lb frozen</td>
</tr>
</tbody>
</table>

Using the chart above, answer the following questions.

1. **Market value** is the price a consumer will pay for a good or service. How does the market value change given the different seasons?

Possible answer: The market values of strawberries, grapes, and peaches are lower in the summer and higher in the winter. The market values of raspberries and blueberries are lower in the summer. The raspberries and blueberries have a low market value in the winter but are sold frozen.

2. What are possible reasons to cause a change in the **market value** of the fruit?

Possible answer: One reason to cause change in the market value is the weather. In the summer, fruits are in high supply so the cost is less. Another reason is that during the winter, fruits are shipped from other parts of the country that still grow the fruits.

3. Raspberry and blueberry jelly are your top sellers. The market value of both fruits in the winter increases as the supply is limited. You do have the option to purchase the frozen alternative. Given the market value, which option will you choose when ordering the fruit to make jelly? Why?

**Answers will vary:** I will still choose the fresh fruit to make my jelly in the winter because they are the top sellers. I can increase the price slightly to recover some of the cost. I want it to continue to be a top seller because of the fresh taste. I will choose the frozen alternative during the winter months. They are cheaper and I won’t lose money. It is only during the winter will I use the alternative and I will risk losing sales.
for this small amount of time because I would be saving so much money going with frozen vs. fresh fruit.

4.) When comparing two items, the unit must be the same. What is the definition of unit price in this scenario?
The unit price is how much something costs per 1 pound in this example.

Guiding Questions
What do they notice about the market values of each fruit in one season?
How does the market value change from each season?

Students may share how market value affects their decisions according to the Market Value Worksheet.

Assessment:

1. Manuel is a furniture designer. He is making a chair. Select the capital goods he needs from his workshop in order to make the chair. Remember that capital goods are NOT used up when making goods and services.
   Possible answers: Ruler, hammer, saw, workbench, light, scissors, and paintbrush.

2. Your school is getting new uniforms.
   a. What goods will be used to make your uniforms? (Cloth, thread, needles, buttons, zippers)
   b. What services will be used? (Designing the uniforms, transporting the uniforms, selling the uniforms)
   c. How will these goods be produced? (Cloth factories, needle manufacturers, zipper companies)
   d. Who will perform the services? (A designer, a seamstress, a truck driver, a sales representative)
   e. Who will consume the uniforms? (The parents and students at the school will consume the uniforms)

3. Read the table with the market values of several different wholesale fruits. Compare the prices of the different fruits.

<table>
<thead>
<tr>
<th>Wholesale Fruit</th>
<th>Market Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>$43.75</td>
</tr>
<tr>
<td>Raspberries</td>
<td>$32.94</td>
</tr>
<tr>
<td>Pineapple</td>
<td>$65.71</td>
</tr>
</tbody>
</table>

a. Select which fruit has the highest value. (Pineapples)
b. How do you know this fruit’s value is more than the other fruits in the table? (Pineapples have the highest price, and therefore the highest value.)
c. Predict what would happen if there was a tsunami in the Hawaiian Islands, the USA’s top producer of pineapple. How would this affect the market value of pineapple? (The price of pineapples would go up because the tsunami would cause a decrease in the supply of pineapples.)