5.2 *MADE IN GERMANY*—GERMAN PRODUCTS AND INTERNATIONAL TRADE

What is the significance of Germany's trade relationships with the United States or Canada?

C3 Framework Indicator	**D2.Eco.14.9-12.** Analyze the role of comparative advantage in international trade of goods and services. **D2.Eco.15.9-12.** Explain how current globalization trends and policies affect economic growth, labor markets, rights of citizens, the environment, and resource and income distribution in different nations.
Staging the Compelling Question	This inquiry focuses on the interdependence of trade between the United States or Canada and Germany.

Supporting Question 1	Supporting Question 2	Supporting Question 3
Which goods and services does Germany export to the United States or to Canada?	Why do countries, such as the United States and/or Canada, import goods and services from other countries, such as Germany?	What specific bilateral trade agreements, if any, make trade easier between Germany and the United States, or Germany and Canada?
Formative Performance Task	**Formative Performance Task**	**Formative Performance Task**
Students will compare their predictions with actual trade data between the United States and Germany, or Canada and Germany.	In this classroom trading simulation, students will receive goods and rate their total satisfaction with the product. After trading with their neighbor, a larger group, and eventually the whole class, students will see whether their satisfaction ratings have increased or decreased.	Students will research specific trade agreements between Germany and their home country.
Featured Sources	**Featured Sources**	**Featured Sources**
Source A: *Observatory of Economic Complexity*	Small items for classroom trading simulation or index cards.	**Source A:** *Government of Canada* **Source B:** *Office of the United States Trade Representative*

Summative Performance Task	**Argument:** Construct an argument (e.g., detailed outline, poster, essay) that addresses the compelling question using specific claims and relevant evidence from historical or contemporary sources while acknowledging competing views.
Taking Informed Action	**Extention:** Research the North American Free Trade Agreement, and find out if it has been replaced with a new trade agreement.
	Understand: Many regions of the United States and Canada have products that symbolize that area.
	Assess: Research products produced in your region of the United States or Canada that are unique.
	Act: Connect with a class in Germany and send them a video introducing your product.

COMPELLING QUESTION

- **What is the significance of Germany's trade relationships with the United States or Canada?**

INQUIRY OVERVIEW

This inquiry focuses on the interdependence of trade between the United States or Canada and Germany. Upon completion of their work and playing the interactive classroom trading game, students have an understanding of basic economic principles, such as competitive advantage and opportunity cost. They will also research current trade barriers and agreements that may affect international trade relations.

TEACHER BACKGROUND

The United States Census Bureau reports that Germany was the fifth largest trading partner of the U.S. in 2019, after Mexico, Canada, China, and Japan. In 2019, Germany's exports to the United States were valued at roughly $111 billion. Germany's imports from the U.S. amounted to roughly $61.6 billion worth of goods. That's a lot of trade; Americans are clearly interested in products that are "Made in Germany."

German manufactured goods, the products of its long tradition of engineering and high-tech skill, have an excellent reputation worldwide. The country's economy is heavily oriented towards exports, and Germans are understandably proud that the words "Made in Germany" are understood as a symbol of quality. Although Americans will likely recognize the names of many of the larger global firms with German roots (e.g., *Daimler-Benz*, *Siemens*, *BMW*, *Audi*, *Deutsche Bank*, *Bosch*, SAP, and others), Germany's numerous small and mid-sized firms, often producing precision products of high quality for specialized use, are more typical of the country's economy. Such companies benefit from good economic conditions and a well-trained workforce. Many of the country's best-known exports are related to engineering, especially in automobiles, machinery, metals, and chemical goods.

After the U.S., China, and Japan, Germany has the world's fourth largest national economy. With a population of over 82 million people, it is the largest and most important market in the European Union (EU).

"Germany is the 2nd largest export economy in the world and the 3rd most complex economy according to the Economic Complexity Index (ECI). In 2017, Germany exported $1.33T and imported $1.08T, resulting in a positive trade balance of $251B. In 2017 the GDP of Germany was $3.68T and its GDP per capita was $50.6k.

The top exports of Germany are Cars ($158B), Vehicle Parts ($64.1B), Packaged Medicaments ($50.6B), Planes, Helicopters, and/or Spacecraft ($27.2B) and Human or Animal Blood ($23.7B), using the 1992 revision of the HS (Harmonized System) classification. Its top imports are Cars ($60B), Vehicle Parts ($42.1B), Crude Petroleum ($30.1B), Packages Medicaments ($25.8B) and Human or Animal Blood ($22.1B).

The top export destinations of Germany are the United States ($111B), France ($103B), China ($95B), the United Kingdom ($90.3B) and the Netherlands ($84.5B). The top import origins are China ($109B), the Netherlands ($89.9B), France ($69.1B), the United States ($61.6B) and Italy ($58.5B).[1]"

According to the Fortune Global 500 for 2019, of the world's 500 largest stock market listed companies measured by revenue, 29 are headquartered in Germany and 121 in the United States. In 2019, the ten largest companies in Germany were *Volkswagen*, *Daimler*, *Allianz*, *BMW Group*, *Siemens*, *Bosch Group*, *Uniper, Deutsche Telekom, BASF*, and *Deutsche Post DHL Group*.

TIME: 3–4 45 minute classes

CONCEPTS LIST

- Imports
- Exports
- Global trade / International Trade
- Supply and demand
- Trade surplus
- Trade deficit
- Globalization
- Gross Domestic Product (GDP)
- Gross National Income (GNI)

INSTRUCTIONAL RESOURCES

- Internet access
- "Canada - OEC data."Observatory of Economic Complexity, https://oec.world/en/profile/country/can/
- "Germany—OEC data." *Observatory of Economic Complexity*, https://atlas.media.mit.edu/en/profile/country/deu/.
- "United States—OEC data." *Observatory of Economic Complexity*, https://atlas.media.mit.edu/en/profile/country/usa/.
- "Trade and Investment Agreements." *Government of Canada*, 3 January 2019, https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/index.aspx?lang=eng.
- "Trade Agreements." *Office of the United States Trade Representative*, https://ustr.gov/trade-agreements.

INTRODUCTORY QUESTION

What Germany brands do you know?
What do you think are the main exports from Germany to the U.S.?

Student responses will vary, but may include: *Mercedes-Benz*, *BMW*, *Audi*, *Porsche*, *Volkswagen*, *Adidas*, *Continental Tire*, *Nivea*, *Puma*, *Hugo Boss*, *SAP*, *Aldi*, *Lufthansa*, *DHL*, *Haribo*, *T-Mobile*, *Braun*, *Henkel*, *Miele*, *Bayer*, *Recaro*, *Stihl*, *Montblanc*, *Schwarzkopf*, and *Dr. Oetker*.

SUPPORTING QUESTION #1

Which goods and services does Germany export to the United States or to Canada?

➤ Formative Performance Task

Ask students to examine this list of goods exported from Germany to the United States , or from Germany to Canada. They should make a list (numerical order) of the products/services they believe account for the highest exports.

- Animal products
- Arts and antiques
- Chemical products
- Food stuffs
- Medical instruments
- Machines
- Metals
- Paper goods
- Plastics
- Precious metals
- Textiles
- Cars

1 "Germany." *OEC*, 2019, https://atlas.media.mit.edu/en/profile/country/deu/.

Compare predictions with actual trade data from this site: https://atlas.media.mit.edu/en/profile/country/deu/ (Click on Visualizations, then choose Germany with partner United States—Bilateral—Exports to Destination / Tree Map.).
What surprised them about the results of their comparison?

➤ **Resources**

- "Germany—OEC data." *Observatory of Economic Complexity*, https://atlas.media.mit.edu/en/profile/country/deu/.

SUPPORTING QUESTION #2

Why do countries, such as the United States and/or Canada, import goods and services from other countries, such as Germany?

➤ **Formative Performance Task**

Classroom Trading Game:

For this game pack a brown paper bag with good(s) for each student. Make sure there is a wide range of goods between the bags. Think about small items from the dollar store e.g. stickers, chalk, pens, post-its, shampoo, candy, sponges, glue stick, mac and cheese, or even beans. Pass out one bag to each student, and have them (privately) examine their goods. Ask students to rank their total satisfaction with the goods on a scale from 0 – 10 (zero being extremely unsatisfied and 10 being extremely satisfied). Record the individual answers on the board.

Now ask students to do a "local trade" with just their neighbor. Let students know that they do not have to trade if they wish not to do so. After the local trade, asks students again for their individual scores of satisfaction, and record the answers on the board.

In the second round, student will simulate a "regional trade". Divide students into four groups to trade. Remind students they do not have to trade if they wish not to. After the regional trade, ask students again for their scores of satisfaction, and record the answers on the board.

For the final round, the students will simulate "international trade" as a whole class. Remind students they do not have to trade if they wish not to do so. After the international trade round, ask students to rank their satisfaction one last time, and record the answers on the board.

Ask students what conclusions they can make regarding the satisfaction of trading with multiple partners. Why do they think this is so? Depending on how much the class knows about economic theories, discuss these with students as you see fit (opportunity cost, comparative advantage, competitive advantage, etc.…).

***Note:** To keep this game budget friendly, you can hand out index cards with the name of an item on each card instead of purchasing the items.

SUPPORTING QUESTION #3

What specific bilateral trade agreements, if any, make trade easier between Germany and the United States, or Germany and Canada?

➤ **Formative Performance Task**

As individuals or as groups, students should research specific trade agreements between Germany and their home country. They should also research specific EU trade agreements that may make international trade between the two countries they are examining easier.

➤ Resources

- "Trade and Investment Agreements." *Government of Canada*, 3 January 2019, https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/index.aspx?lang=eng.
- "Trade Agreements." *Office of the United States Trade Representative*, https://ustr.gov/trade-agreements.

☑ SUMMATIVE PERFORMANCE TASK

What is the significance of Germany's trade relationships with the United States or Canada?

Construct an argument (e.g., detailed outline, poster, essay) that addresses the compelling question using specific claims and relevant evidence from historical or contemporary sources while acknowledging competing views.

⊕ EXTENSION (OPTIONAL) TASK

Implemented on January 1, 1994, the North American Free Trade Agreement (NAFTA) is an agreement between the United States, Canada, and Mexico. It was designed to remove tariff barriers between the three countries. NAFTA was intended to boost trade and ensure that North American producers received priority over goods not originating from the United States, Canada, or Mexico. Since 2017, President Donald Trump has been working on reaching a new trade agreement with Canada and Mexico to replace NAFTA. Research the current status of NAFTA, as well as whether a new trade agreement between the three nations has been adopted.

✪ TAKING INFORMED ACTION

UNDERSTAND Many regions of the United States and Canada have products that symbolize that area.

ASSESS Research products produced in your region of the United States or Canada that are recognized as distinctive to the region and determine what makes them unique.

ACT Connect with a class in Germany and send them a video introducing the product that is unique to your region. Ask the German students to do the same, so that you can get to know the specialties of their area. The Transatlantic Outreach Program can help connect you with a class in Germany.