

## Micro Unit: Introduction to Trade and Exports

*Objective:* Students will be able to identify key elements of international agriculture trade in key commodities. Additionally, students will be able to track U.S. agricultural commodities to international markets and end-users.



### Key Vocabulary

Tariff	Free Trade Agreement	USMCA	NAFTA	FMD
Export-Import Bank of the U.S.	GDP	Dumping	WTO	Duty
Letter of Credit	KORUS	MAP	Commodity	FAS
MT (Metric Ton)	U.S. Grains Council	U.S. Wheat Associates		Agriculture Commodity

### Interest Approach/Anticipatory Set

1. Use this interactive map to guide students state-to-state with focus on Ohio: [http://ec2-50-19-246-156.compute-1.amazonaws.com/US\\_Grains/US\\_Grains\\_Portal/](http://ec2-50-19-246-156.compute-1.amazonaws.com/US_Grains/US_Grains_Portal/) Using the tabs at top of page, look at your congressional district.
2. Have students find one current event in Agriculture Trade/Exports; share, discuss. Discover unknowns.
3. <https://grains.org/video-exports-matter-to-farmers/> Video outlines export importance to U.S. economy and the world

### Teaching Strategies

Individual Study  
Read/Research and Report  
Small Group Information Discovery

### Teaching Tools

1. Teacher and students will need access to internet
2. Grains.org is a great site for information on Corn, DDGS, Ethanol. Also see other web resources in this plan.

### Resources for teacher preparation and/or student study:

- Moving of Commodities: <https://grains.org/wp-content/uploads/2018/02/chapter5.pdf> Most information you need will be found on first 2 pages.
- Exports by State: USDA Economic Research Service <https://www.ers.usda.gov/data-products/state-export-data/annual-state-agricultural-exports/>
- Exports in 2017 and more: USDA Foreign Ag Service <https://www.fas.usda.gov/data/top-us-agricultural-exports-2017>
- Exports in 2016 and 2017: bottom of home page at <https://grains.org/> Great current events page for teaching Ag Exports.
- <https://www.uswheat.org/> Great site for wheat export information

### Activities

Define the Vocabulary Terms  
Apply each Vocabulary Term to an export scenario

#### Ohio Specific Activity:

Find Ohio's top 10 Agricultural Export Commodities (some may be 2016 statistics).  
Find the value of each of Ohio's top 10 Agricultural Export Commodities.  
Answer this question in a paragraph: Why do exported commodities from Ohio matter.

#### U.S. Specific Activity:

Find which state is the leader in the export of the following:  
Corn    Wheat    Soybeans    Pork    Beef    Eggs    Poultry Meat    Dairy

#### Questions to research:

How do Ohio's Agriculture Commodities leave the state (methods of transportation)? Find 3 major ways.  
What countries import the most Ethanol from the U.S.?  
Where are Agriculture Commodities loaded on ships for transport to our international customers?

## **Assessment of Learning**

*Assessing the students' learning on Trade and Exports can be accomplished a number of ways.*

1. Questions that call attention to the statistics and information at <https://www.fas.usda.gov/topics/benefits-trade>
2. Vocabulary quiz
3. Unit test that requires students to have knowledge of:
  - exports from Ohio and from the U.S.
  - how Ohio Ag commodities reach ports for export
  - where are ports located? Why?
4. Short student presentations on an aspect of U.S. exports that is of special interest OR have small groups select a commodity, research it, and present to the class
5. Develop a contest
6. Have students create a list of every country where we export an Ag commodity and what we export to those destinations. To this by continent i.e North Am (Canada, Mexico), Africa, Europe (including Ukraine and Middle East), Asia and SE Asia, Australia, South Am, Central Am (excluding Mexico), Caribbean countries, other.
7. Teacher's own creativity

## **Earning the "Introduction to Trade and Exports" Certificate**

- Teacher will determine from assessment methods which students have mastered this unit.
- Teacher may submit those names to [BMoffitt@OhioCornandWheat.org](mailto:BMoffitt@OhioCornandWheat.org) for creation of the "Introduction to Trade and Exports" certificate
- Note: this certificate is for the teacher to use as an award and/or an insert for the student graduation portfolio. It is not an industry credential. However, it will hopefully serve the student as an attractive addition to their portfolio for employment, credit, or higher education. Later... may work into an industry credential.

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**Tariff-** Global Economics and Food Markets

Outcome 1.11 Principles of Business Economics

1.11.4 & 1.11.5 – Both fit this vocab word

1.11.9 – Is a little bit of a stretch

**Export-Import Bank of the U.S.** – Global Economics and Food Markets

Outcome 1.8 Operations Management

1.8.1 – Needs for using financial documents

Outcome 1.9 Financial Management

1.9.8 – Looking at how to make income or expenditures

Business Management for Agricultural and Environmental Systems

Outcome 1.9 Financial Management

1.9.3 – Reviewing and summarizing investment strategies (2)

**Letter of Credit** – Business Management for Agricultural and Environmental Systems

Outcome 1.9

1.9.6 – Explaining credit ratings (5)

Global Economics and Food Markets

Outcome 1.9

1.9.1 – Analyze and interpret financial documents

**Metric Ton (MT)** –

**Free Trade Agreement** - Global Economics and Food Markets

Outcome 1.5 Global Environment

1.5.3 – Use cultural intelligence to interact with individuals from diverse cultural settings.

1.5.4 - Recognize barriers in cross-cultural relationships and implement behavioral adjustments.

1.5.5 - Recognize the ways in which bias and discrimination may influence productivity and profitability.

1.5.6 - Analyze work tasks for understanding and interpretation from a different cultural perspective.

1.5.7 - Use intercultural communication skills to exchange ideas and create meaning.

**GDP** –

**KORUS** – Global Economics and Food Markets

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**U.S. Grains Council** – Global Economics and Food Markets

Outcome 1.6 Business Literacy

1.6.1 - Identify business opportunities.

1.6.2 - Assess the reality of becoming an entrepreneur, including advantages and disadvantages (e.g., risk versus reward, reasons for success and failure).

1.6.3 - Explain the importance of planning your business.

1.6.4 - Identify types of businesses, ownership and entities (i.e., individual proprietorships, partnerships, corporations, cooperatives, public, private, profit, not-for-profit).

1.6.6 - Identify the target market served by the organization, the niche that the organization fills and an outlook of the industry.

1.6.7 - Identify the effect of supply and demand on products and services.

1.6.8. Identify the features and benefits that make an organization's product or service competitive.

1.6.10 - Describe the impact of globalization on an enterprise or organization.

#### Outcome 1.8 Operations Management

1.8.1 - Forecast future resources and budgetary needs using financial documents (e.g., balance sheet, demand forecasting, financial ratios).

1.8.2 - Select and organize resources to develop a product or a service.

1.8.3 - Analyze the performance of organizational activities and reallocate resources to achieve established goals.

#### Outcome 1.10 Sales and Marketing

1.10.4 - Identify the company policies and procedures for initiating product and service improvements.

1.10.5 - Monitor customer expectations and determine product/service satisfaction by using measurement tools.

1.10.6 - Discuss the importance of correct pricing to support a product's or service's positioning in the marketing mix.

1.10.7 - Describe the importance and diversity of distribution channels (i.e., direct, indirect) to sell a product.

1.10.8 - Use promotional techniques to maximize sales revenues (e.g., advertising, sales promotions, publicity, public relations).

1.10.9 - Describe how product mix (e.g., product line, product items) maximizes sales revenues, market, share and profit margin.

#### **USMCA** - Global Economics and Food Markets

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**Dumping - Agricultural “dumping”**—the practice of exporting commodities at prices below the cost of production—can be devastating for farmers in importing countries, especially in low-income countries with little power to defend their markets.

#### **NAFTA** – Global Economics and Food Markets

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#### **U.S. Wheat Associates – Global Economics and Food Markets**

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#### **WTO – Global Economics and Food Markets**

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#### **Commodity –**

## **FMD – Global Economics and Food Markets**

### **Outcome 1.5 Global Environment**

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## **Duty –**

### **Agriculture Commodity – Agronomic Systems**

#### **Outcome 8.1. Plant Nutrition**

- 8.1.1. Compare and contrast organic and inorganic sources of macronutrients and micronutrients.
- 8.1.2. Describe the functions of macronutrients and micronutrients in plants and the role that microorganisms play in plant nutrition.
- 8.1.3. Determine the nutrient requirements of plants.
- 8.1.4. Identify symptoms and causes of plant nutrient deficiencies and toxicities.
- 8.1.5. Collect soil and plant tissue for testing and analysis.
- 8.1.6. Analyze and draw conclusions from soil and plant tissue test data.
- 8.1.7. Distinguish between biotic and abiotic factors (e.g., minerals, pH, microorganisms) that influence and optimize the availability of nutrients for plants.
- 8.1.8. Calculate nutrient requirements and select nutrient sources and additives for optimum economic return.
- 8.1.9. Determine the nutrient content of organic and inorganic fertilizers.
- 8.1.10. Select the methods and time of nutrient application and apply nutrients.

#### **Outcome 8.2. Plant Reproduction**

- 8.2.1. Identify the reproductive anatomy of plants and describe their physiological functions.
- 8.2.2. Describe how biotic and abiotic factors (e.g., insects, light, temperature, microorganisms, moisture, location) influence and optimize plant reproduction.
- 8.2.3. Compare and contrast variations of plant reproductive systems among plant species.
- 8.2.4. Select seeds and seed stock for desired traits.
- 8.2.5. Select and apply methods that create desired traits in seeds.
- 8.2.6. Select and apply all methods of asexual plant propagation for desired traits (e.g., grafting, layering, cutting, cloning).

## **MAP –**

### **FAS – Global Economics and Food Markets**

#### **Outcome 1.5 Global Environment**

- 1.5.3 – Use cultural intelligence to interact with individuals from diverse cultural settings.
- 1.5.4 - Recognize barriers in cross-cultural relationships and implement behavioral adjustments.
- 1.5.5 - Recognize the ways in which bias and discrimination may influence productivity and profitability.
- 1.5.6 - Analyze work tasks for understanding and interpretation from a different cultural perspective.

1.5.7 - Use intercultural communication skills to exchange ideas and create meaning

### **Questions to Research –**

**How do Ohio's Agriculture Commodities leave the state (methods of transportation)? Find 3 major ways.**

Agronomic Systems

Outcomes 8.6. Handling and Storage

8.6.7. Prepare products for sale, transportation and storage.

8.6.10. Explain the reasons for preparing plants and plant products for distribution.

8.6.11. Implement and evaluate techniques for grading, handling, packaging, and loading of plants and plant products for distribution or transportation.

**What countries import the most Ethanol from the U.S.?**

Energy Systems Management

Outcomes 9.1 Energy

9.1.2. Identify, compare and contrast renewable energy sources and the technology used to generate energy.

9.1.3. Identify, compare and contrast alternative energy sources and technology used to generate energy (e.g., fuel cells, hydrogen, nuclear).

9.1.4. Identify the social, economic and environmental drivers and barriers that influence the development and use of energy sources.

**Where are Agriculture Commodities loaded on ships for transport to our international customers?**

Agronomic Systems

Outcomes 8.6. Handling and Storage

8.6.7. Prepare products for sale, transportation and storage.

8.6.10. Explain the reasons for preparing plants and plant products for distribution.

8.6.11. Implement and evaluate techniques for grading, handling, packaging, and loading of plants and plant products for distribution or transportation.

**This worksheet aligns the best with the Global Economics and Food Market Standards.**