

Topic 4.3 — The Columbian Exchange - Student

Standards Table

Framework	Standard
AP World History: Modern	Unit 4 LO D; KC-4.1.V; KC-4.1.V.A–D
NCSS National Standards	Theme 1: Culture; Theme 3: People, Places & Environments
Florida BEST Standards	SS.912.W.4.1; SS.912.W.4.2; ELA.K12.EE.1.1

Lesson Overview

The Columbian Exchange refers to the transfer of plants, animals, people, pathogens, and technologies between the Eastern and Western Hemispheres after 1492. This global biological exchange dramatically reshaped ecosystems, diets, economies, and populations around the world. European colonization of the Americas created new connections that rapidly moved biological species across continents on an unprecedented scale. These changes altered the environment and the ways societies lived, farmed, and interacted.

One major effect of the Columbian Exchange was the spread of diseases such as smallpox, measles, malaria, and influenza from Afro-Eurasia to the Americas. Indigenous Americans had no immunity to these pathogens, leading to catastrophic population loss in many regions. At the same time, new American crops such as maize, potatoes, and cassava spread to Europe, Africa, and Asia, improving nutrition and increasing population.

Other exchanges included the introduction of European fruit trees, grains, pigs, cattle, and horses into the Americas, as well as African crops brought through the transatlantic slave trade. These exchanges shaped agricultural systems, labor systems, and global trade patterns for centuries to come.

Learning Objectives

Students will be able to:

- Identify the causes of the Columbian Exchange.
- Describe the environmental and demographic effects in both hemispheres.
- Compare how plants, animals, and diseases moved across continents.
- Analyze primary sources that illustrate the biological and social impact of these exchanges.
- Explain how new crops influenced population growth in Afro-Eurasia.

Essential Vocabulary

- **Columbian Exchange** — The movement of plants, animals, diseases, and people between the Old and New Worlds after 1492.
- **Smallpox** — A deadly disease that spread from Europe to the Americas, killing large numbers of Indigenous people.
- **Staple Crop** — A basic food crop that becomes a major part of a region's diet.

- **Domesticated Animals** — Animals raised by humans for food, work, or other uses.
- **Vectors** — Creatures like mosquitoes and rats that spread disease.

Background Reading

The Columbian Exchange began because European voyages linked two previously separate biological worlds. Plants, animals, and microbes evolved independently in the Eastern and Western Hemispheres for more than 10,000 years. When Europeans reached the Americas, they unintentionally carried with them diseases, animals, and seeds that transformed Indigenous environments and lifestyles. Likewise, American crops spread rapidly into Afro-Eurasia due to their high nutritional value and ability to grow in diverse climates.

The environmental effects were profound. New livestock such as horses, cattle, and pigs reshaped landscapes by grazing, trampling, and competing with native species. Plantation economies in the Caribbean and Brazil grew sugar and other cash crops using enslaved African labor, connecting the Columbian Exchange to the rise of the transatlantic slave trade.

The Columbian Exchange also changed diets worldwide. American crops like maize, potatoes, and cassava became essential in Europe, Africa, and China, contributing to significant population increases. At the same time, diseases from Europe caused massive demographic collapse in the Americas, reshaping societies and opening the way for European colonization.

PRIMARY SOURCE 1

Bernal Díaz del Castillo, *The Conquest of New Spain* (c. 1560)

Link: <https://sourcebooks.fordham.edu/source/bernal1.asp>

In the towns and provinces through which we passed, the people were dying in great numbers, as their bodies were covered with the sores of a disease. There was no cure for it, and the mortality was very great. The natives said it had come upon them from the time the Christians arrived. They had not known such sickness before, and their distress was beyond telling. Whole communities were left desolate, and the fields lay untilled for want of hands to work them.

We saw many villages in which scarcely any inhabitants remained, for many had died of the pestilence. In some places, half the people had perished; in others, even more. As we marched, the roads were nearly empty, and the towns were quiet, for the disease had struck everywhere with terrible force.

Why this matters:

This source documents the devastating impact of Old World diseases on Native American populations during early Spanish colonization.

Guided Source Analysis Questions — Source 1

1. What disease-related effects does Díaz describe among Indigenous communities?

2. How does this source illustrate the unintentional spread of Old World pathogens?
3. What environmental and economic consequences does Díaz imply resulted from population loss?

PRIMARY SOURCE 2

Thomas Hariot, *A Briefe and True Report of the New Found Land of Virginia* (1588)

Link: <https://sourcebooks.fordham.edu/mod/1588hariot-virginia.asp>

The inhabitants of this land have great store of maize, beans, squash, and sundry other fruits, which they use for their sustenance. We have found these foods to be wholesome and of good nourishment, and they may be planted and gathered in great abundance. Of the maize, there are several sorts, and it may be prepared in many ways, serving as bread or as a kind of porridge.

This grain grows with such increase that the fields may yield forty-fold, and the soil is very fertile. I doubt not that this crop, once carried into our own country, will be of great benefit, for it may serve to feed both man and beast. And likewise the beans and squash, being of hearty substance, may be used to sustain great numbers of people.

Why this matters:

Hariot's observations show how American crops were recognized early as valuable and were soon incorporated into European diets, contributing to population growth.

Guided Source Analysis Questions — Source 2

1. How does Hariot describe American crops like maize?
2. Why did European states view these crops as valuable for their populations?
3. How does this document reflect the environmental benefits of new foods in Afro-Eurasia?

Comparison Table: Biological Movements in the Columbian Exchange

Category	Western → Eastern Hemisphere	Eastern → Western Hemisphere
Plants	Maize, potatoes, cassava	Sugar, wheat, rice
Animals	Llamas (limited)	Horses, cattle, pigs
Diseases	—	Smallpox, measles, malaria
Environmental Impact	Increased nutrition in Afro-Eurasia	Landscape change through grazing
Labor Systems	Demand for cash crops grew	Led to coerced labor systems

Major Biological Transfers and Their Effects

Item Transferred	Hemisphere of Origin	Effect
Smallpox	Eastern	Massive Indigenous depopulation
Maize	Americas	Higher nutrition, population growth

Horses	Eastern	Reshaped Indigenous transportation & hunting
Sugar	Eastern	Plantation labor demand ↑
Potatoes	Americas	Population boom in Europe

CCOT / Comparison / Causation Section

Prompt:

Explain one cause of the Columbian Exchange and one significant effect on either the Eastern or Western Hemisphere.

Key Takeaways

- The Columbian Exchange reshaped global ecosystems, diets, and populations.
- Diseases like smallpox caused catastrophic population loss in the Americas.
- American crops improved nutritional diversity in Afro-Eurasia, raising populations.
- European livestock and cash crops transformed Western Hemisphere landscapes.
- The Columbian Exchange connected the world in a deeply ecological way.

DBQ-Style Reflection

Write a **two-paragraph response** explaining the impact of the Columbian Exchange on human societies.

- **Paragraph 1:**
Identify and describe **one biological item** (plant, animal, or disease) transferred during the Columbian Exchange. Explain **how and why** this item moved between the Eastern and Western Hemispheres, and use **specific historical evidence** to show the immediate effects of this transfer.
- **Paragraph 2:**
Explain **one major long-term impact** of this biological transfer on human societies. Your paragraph should analyze **demographic, economic, environmental, or social effects**, and clearly connect those effects to broader historical developments between **1450 and 1750**.

Your response should:

- Be written in **two clearly separated paragraphs**
- Use **specific historical examples**
- Focus on **analysis**, not just listing facts
- Reflect the level of explanation expected in an **AP World History DBQ body paragraph**

Source Citations

- Bernal Díaz del Castillo, *The Conquest of New Spain*. Fordham Internet History Sourcebook.
- Thomas Hariot, *A Briefe and True Report of the New Found Land of Virginia*. Fordham Internet History Sourcebook.