

Module 6: Ohio Resources and Innovations

Learning Target 8

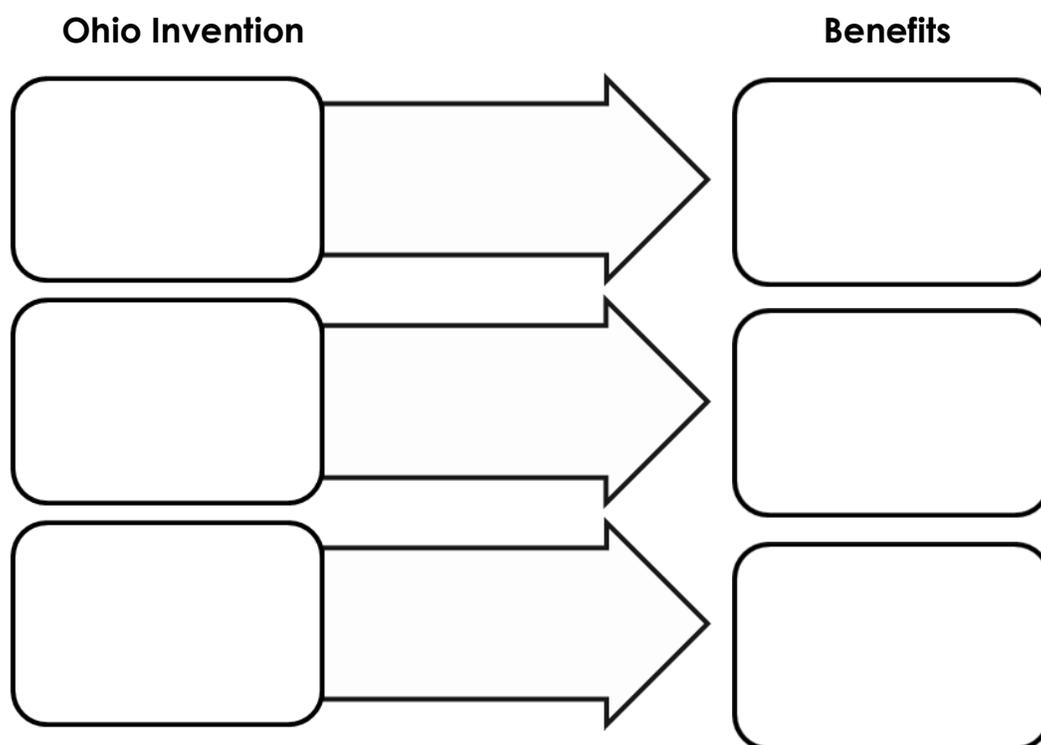
- Identify important inventions in communication, technology and transportation that began in Ohio.
- Explain how technological innovations that originated in Ohio benefitted the United States.



Ohio has influenced the development of the United States. Inventors from Ohio have contributed **innovations** which have benefitted the United States.

For example, the light bulb made it possible for people to work and play after dark. The phonograph allowed people to be entertained in their home. The traffic light and gas mask improved safety. The cash register helped businesses keep track of money.

Other inventions, such as the electric starter and ethyl gasoline for the automobile, improved transportation. The airplane made it possible for people and goods to travel long distances in less time.



Use a graphic organizer like the one above to take notes on benefits of inventions from Ohio.

Learning Target 10

- Explain how Ohio's agriculture, industry and natural resources continue to both influence and be influenced by the economic development of the United States.



Ohio played a crucial role in the early **economic development** of the United States because of Ohio's

- Abundant **natural resources**
- Skilled laborers
- Central location
- Extensive waterways

Ohio's forests provided the resources for building materials and paper. Ohio farms, as well as the fisheries along Lake Erie, supplied food for a rapidly growing nation. Ohio coal powered the factories producing goods. Ohio coal also powered ships and trains that carried products to market during the late 19th and early 20th centuries.

Ohio is using its natural resources to help the nation moves toward **alternative energy sources**.

- Most of Ohio's corn was once used to feed the growing nation. Today a lot of the **corn and soybeans** is used in the production of **bio-fuels**. Bio-fuels are believed to reduce air pollution.
- Ohio is also building **wind turbines** to provide clean energy.

Current economic challenges such as **global competition** influence basic industries in Ohio such as automobile, rubber, steel, and heavy equipment.

Ohio's waterways continue to provide transportation and provide recreational opportunities.

Create a graphic organizer to take notes on the industry use of Ohio's natural resources.



Learning Target 14

Explain how Ohio's location and its transportation systems have influenced the movement of people, products and ideas.



At one time, Ohio was the “**Gateway to the West**”. Ohio's main means to transport goods was the Ohio River. Eventually, **canals**, **railroads** and **roads** were constructed to meet the needs of a westward-expanding nation.

- A canal is a human-made water route. It helped move people and products cheaper.
- Railroads like the Baltimore and Ohio Railroad made travel faster, cheaper, and more direct.
- The National Road linked the frontier with the East Coast.

Ohio continues to function as a major **transportation hub** for the nation. Ohio's large transportation networks include air, highway, rail, and river. These means of transportation are important to the national and international distribution of merchandise. Ohio's transportation network influences the movement of people, products and ideas.

Ohio is also home to corporate offices for banks, insurance companies and retail stores. People from around the world buy Ohio products and materials such as chemicals, rubber, agricultural products, trucks and stone.



Erie Canal, 1902



Ohio Freeway, 2016

Describe why highways are important today to move goods in Ohio, and why canals are not as important as they were.

For video tutorials, interactive review games, and assessment practice for this unit, go to: <http://www.ohiotestprep.com/grade-4>



Geography Checking for Understanding

1. Many Ohio innovations have benefited the United States.

Move the innovations to complete the chart.

- You do **not** need to use all the innovations.

Benefits of Ohio Innovations	
Safety	Entertainment

Cash register 	Gas mask 	Phonograph 	Stoplight 
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2. Select two of Ohio's resources that are used as alternative energy sources.

- coal
- gasoline
- natural gas
- soybeans
- wind

3. Which of Ohio's natural resources powered American railroads and factories in the late 1800s and early 1900s?

- A. coal
- B. electricity
- C. rivers
- D. timber

4. Which two waterways in or near Ohio are important for the transportation of goods and people across the nation?

- A. Lake Erie and the Ohio River
- B. Lake Ontario and the Atlantic Ocean
- C. the Pacific Ocean and the Ohio River
- D. the Gulf of Mexico and the St. Lawrence River

5. What was a major route that Ohio used to transport goods and people to the rest of the country in the early 1800s?

- A. Interstate Highway 71
- B. Appalachian Trail
- C. Cuyahoga River
- D. Ohio River