

The Industrial Revolution Begins Mapping a Revolution: Great Britain

Task: This task is based on the accompanying documents. It is designed to test your ability to work with historic documents to collect information about an historical event.

Objective: Analyze and explain why Great Britain was naturally ready to industrialize before other nations in the world due to having the necessary factors of production.

Directions:

FOR TUESDAY:

1. Read and analyze each document carefully, underlining key phrases and words and connecting to prior knowledge.
2. Answer the questions that follow each document, this will assist you in making sense of what the document is talking about in terms of the start of the industrial revolution in Great Britain.

FOR THURSDAY (do NOT start yet):

3. Using the information from **ALL** the documents create a visual annotated map showing and discussing how each factor described in each document was important to industrial growth and success in Great Britain.
4. Label each factor from each document as either LAND, LABOR or CAPITAL.

DOCUMENTS to ANALYZE:

Document 1: Great Britain's resources and canals circa 1700



Q: According to the map, what resources did Great Britain have that were needed for industrialization?

Document 2: This excerpt is from a witness's description before England's Factory Commission in 1833

You have been a witness of the operative (working) class in these parts; you have seen it grow from nothing into a great body in the space of a few years; how was it recruited?...A good many from the agricultural parts...people left other occupations and came to spinning for the sake of high wages.

Q: Why were workers readily available for factory jobs (use prior knowledge from discussions thus far to help analyze meaning)?

Document 3: Here is an excerpt from *Wealth of Nations*, written by Adam Smith in 1776 that describes the assembly line used in factories during the eighteenth century

I have seen a small manufactory [factory] of this kind where ten men only were employed, and where some of them performed two or three distinct operations...They could...make among them...upwards of 48,000 pins a day...But if they had all wrought [worked] separately and independently...they certainly could not each of them have made twenty...in a day.

Q: According to Smith, why were workers in a factory so productive?

Document 4: Here is an excerpt from *Landmarks in English Industrial History*, a book written by George Warner in 1899

England...has been fortunate in processing the natural conditions necessary for success...We recognize that England is rich in these advantages, that she has coal and iron lying close together, that her sheep give the best wool, that her harbors are plentiful, that she is not ill-off for rivers, and that no part of the country is farther than seventy miles from the sea.

Q: How did geography help England industrialize?

Document 5: Changes in Agriculture

Changes in Agriculture		
Inventor	Invention	Importance
Jethro Tull	Horse-Drawn Seed Drill	Planted seeds in straight rows
Robert Blakewell	Stock Breeding	Improved quality of animals to produce more meat, milk and wool
Cyrus McCormick	Mechanical Reaper	Made grain harvesting easier

Q: What was the result of these changes in agriculture in England (use prior knowledge from discussions thus far to help analyze meaning)?

Document 6: The excerpt is from *The Industrial Revolution* by Thomas S. Ashton and the chart corresponds with the excerpt by illustrating changes in the textile industry




...systematic thought lay behind most of the innovations in industrial practice. Invention...rarely thrives in a community of simple peasants or unskilled manual laborers: only when division of labor has developed...does it come to harvest. The stream of English scientific thought was one of the main tributaries [causes] of the industrial revolution...discoveries in different fields of activity were linked together...

Changes in Textile Machinery		
Inventor	Invention	Importance
John Kay	Flying Shuttle	Increased speed of weaving
James Hargreaves	Spinning Jenny	Spun 8-10 threads at a time; used at home
Richard Arkwright	Water Frame	Large spinning machine driven by water in factories
Edward Cartwright	Power Loom	Water powered; automatically wove thread into cotton
Eli Whitney	Cotton Gin	Separated seed from raw cotton

Q: How did innovation lead to the Industrial Revolution in Great Britain?

Q: Which three inventions were most important to increasing textile production? **EXPLAIN** your answer.

Document 7: Transportation Methods of the Industrial Revolution

Transportation Methods of the mid-1800s		
Method of Transportation	Average Speed	Shipping Costs
Roads 	2 miles per hour by wagon 6–8 miles per hour by stagecoach	15 cents per ton per mile
Canals 	2–5 miles per hour	1.1 cents per ton per mile
Railroads 	10–20 miles per hour (including stops)	3.4 cents per ton per mile

Source: George Rogers Taylor, *The Transportation Revolution, 1815 to 1860*, Rinehart and Company, 1951 (adapted)

Q: Based on this chart, what was one advantage of using railroads compared with other methods of transportation?

Document 8: The following excerpt is from *The Farmer's Tour Through the East of England* by Arthur Young, 1771

As I shall leave Norfolk, it is proper to give a review of the farming methods which have made...this country so famous in the farming world...The great improvements have been made by the following methods:

- By enclosing without the help of Parliament*
- By the introduction of a four year rotation of crops*
- By growing turnips, clover and ryegrass*
- By the country being divided chiefly into large farms*

Q: How did these four changes in agriculture enable England to industrialize more easily (use prior knowledge from discussions thus far to help analyze meaning)?

Document 9: The following excerpt from *The Industrial and Commercial Revolutions in Great Britain During the Nineteenth Century*, E.P. Dutton & Co. describes English industrialization

When one realizes the thousands of internal tariffs that obstructed [slowed down] traffic in Germany up to 1834 and the innumerable tolls and charges that hindered trade in France before 1789...it is clear that the political and economic freedom of England was one of the causes of her industrial expansion.

Q: What are two reasons Knowles cited to explain industrialization in England?

Grading Requirements:

___/22.5 PTS VisualAnnotated Map (using evidence from ALL the documents **explain** how they justify why Great Britain was able to industrialize before other nations)

___/9 PTS Using **ALL DOCUMENT** evidence in visual annotated map

___/4.5 PTS Proper labeling of evidence as land, labor or capital

___/36 TOTAL POINTS

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