# 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:**

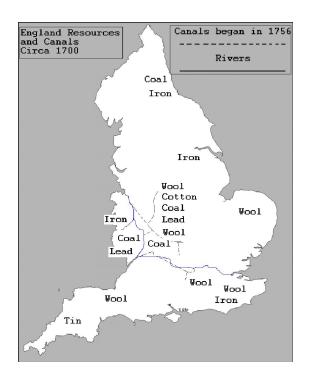
- 1. Read and analyze each document carefully, underlining key phrases and words and connecting to prior knowledge.
- 2. Answer the questions that follow each document, this will assist you in making sense of what the document is talking about in terms of the start of the industrial revolution in Great 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)?
<b>Document 3:</b> Here is an excerpt from <i>Wealth of Nations</i> , 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 operationsThey couldmake among themupwards of 48,000 pins a dayBut if they had all wrought [worked] separately and independentlythey certainly could not each of them have made twentyin a day.
Q: According to Smith, why were workers in a factory so productive?
<b>Document 4:</b> Here is an excerpt from <i>Landmarks in English Industrial History</i> , a book written by George Warner in 1899
Englandhas been fortunate in processing the natural conditions necessary for successWe 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 di	scussions 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...

	<b>Changes in Textile Machine</b>	ry
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

	cowen om	Separated seed from Id. Cotton	
Q: How did innovation lead to the In	dustrial Revolution in Great F	Britain?	
Q: Which three inventions were mos	t important to increasing texti	le production? <b>EXPLAIN</b> 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	15 cents per ton per mile
THE REAL PROPERTY.	6–8 miles per hour by stagecoach	
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)

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 madethis country so famous in the farming worldThe 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 1789it 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	Q: Based on this chart, what was one advantage of using railroads compared with other methods of transportation?
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