



LEVEL
2

Industry and Population

from the GeoInquiries™ collection for World History

Target audience – World history learners

Time required – 15 minutes

Activity	Evaluate population increase relative to resources in Great Britain from 1750 to 1861.
Social Studies Standards	C3:D2.His.16.6-8. Organize applicable evidence into a coherent argument. C3:D2.Geo.1.9-12. Use geospatial and related technologies to create maps to display and explain the spatial patterns of cultural and environmental characteristics.
Learning Outcomes	<ul style="list-style-type: none">• Use maps, graphs, and charts to explore population growth in Great Britain during the first Industrial Revolution.• Connect a pattern of industry resource growth to population growth and distribution.
Level 2 GeoInquiry Requirements	<ul style="list-style-type: none">• A free school ArcGIS Online organization account. Instructors or students must be signed in to the account to complete this activity.• Approximately 1 credit will be used per person in the completion of this activity as scripted.

Map URL: <http://esriurl.com/worldHistoryGeoInquiry10>

Ask

What was the population in Great Britain in 1750?

- Click the link above to launch the map.
- In the upper-right corner, click Sign In, and then use your ArcGIS Online organizational account to sign in.
- To the left of the map, widen the Details pane until you see the names of the buttons and click Content.
- Uncheck the 1750 Great Britain Resources layer box to turn off the layer.
- Pause over the Major Cities layer and click the Table button.
- In the table, click the Population In 1750 field header and choose Statistics.
- ? What was the total population of European countries in 1750 (Sum of Values)? [812,000]



Explore

What did population patterns look like in Great Britain in 1750?

- Close the table, and then click Bookmarks and choose Great Britain.
- See the Copy A Layer and Rename A Layer ToolTips on the next page.
- Make a copy of the Major Cities layer, and then repeat the copy procedure to create another copy.
- Rename one of the Major Cities - Copy layers to **Major Cities 1750** and the other copy to **Major Cities 1861**.
- Pause over the Major Cities 1750 layer and click the Change Style button.
- ① For Choose An Attribute To Show, choose Population In 1750.
- ② For the drawing style, select Counts And Amounts (Size), and then click Options. Scroll down and check the Classify Data box, and then click OK and Done.
- Turn off all layers except Major Cities 1750.
- Pause over the Major Cities 1750 layer and click the Show Legend button.
- ? What was the general population pattern in 1750? [London in the south was by far the largest, with other cities in the mid to western part of Great Britain midsize and cities in the north very small.]

Acquire

What did population patterns look like in Great Britain in 1861?

- Pause over the Major Cities 1861 layer that you created in the previous step and click the Change Style button.
- ① For Choose An Attribute To Show, choose Population In 1861.
- ② Click Counts And Amounts (Size) Options, check the Classify Data box, and then click OK and Done.
- View the Major Cities 1861 layer legend.
- ? What was the general population pattern in 1861? *[London in the south was by far the largest cities in the mid-section of Great Britain increasing in size.]*

Analyze

What might be a factor for population growth in Great Britain from 1750 to 1861?

- Turn on the 1850 Great Britain Resources layer.
- ? How did the resource locations in 1850 compare to the population patterns of the major cities in Great Britain in 1861? *[The growing cities appeared to be clustering around the increase in resources.]*

Act

What was the connection between resources and population patterns in Great Britain?

- Using the table statistics method, what was the population in Great Britain in 1861? *[5,179,000]*
- Turn off all layers except Major Cities 1863 and click each city on the map, noting the graphs in the pop-ups.
- ? Which factor does this map propose to have contributed to population growth and distribution in Great Britain between 1750 and 1861? *[The mainly agrarian society in Great Britain up until the late 1700s was transformed by mechanization, which spawned manufacturing factories, and the like. The Industrial Revolution drew people from rural farming communities, causing city population growth.]*

COPY A LAYER

- In the Contents pane, pause over a layer, and then click the More Options (ellipses) button and choose Copy.

RENAME A LAYER

- In the Contents pane, pause over a layer, and then click the More Options (ellipses) button and choose Rename.
- Rename the layer, and then click OK.

Next Steps

DID YOU KNOW? ArcGIS Online is a mapping platform freely available to public, private, and home schools. A school subscription provides additional security, privacy, and content features. Learn more about ArcGIS Online and how to get a school subscription at <http://www.esri.com/schools>. THEN TRY THIS...

- To evaluate the rate of population increase of each city, under the Major Cities 1750 layer, click the Change Style button.
- For Select A Drawing Style, click the Counts And Amounts Option and set Divided By to Population In 1861 to see which cities grew by the largest percentage in that 110 years.

TEXT REFERENCES

This GIS map has been cross-referenced to material in sections of chapters from these middle school texts.

- *World History by Glencoe — Chapter 19*

- *World History by Prentice Hall — Chapter 19*