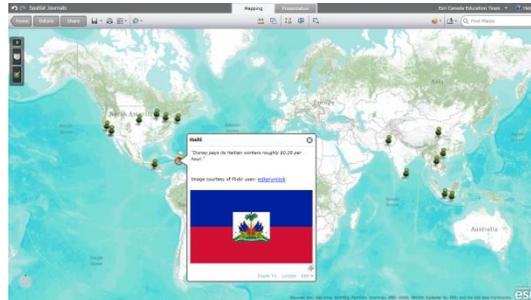


Spatial Journals



Objective:

Students will read an article on sweatshops and produce a spatial journal that features all the locations mentioned throughout the article. Using ArcGIS Explorer Online, students will have an opportunity to symbolize their data as they wish. Most importantly, students will be able to take the information they discovered in the article and apply it in a spatial context. Students will test their understanding of what a location is, and will have the opportunity to forge a link between the areas being discussed in the article and their relative location on Earth. At the end of this lesson, students will have the opportunity to offer their interpretation of the article through a presentation and share their maps with their peers.

Connections to Curriculum Topics:

- Trade/Exchanges
- Global Connections
- Globalization
- Relative Location
- Exploitation
- Human Rights

Requirements:

- Internet browser (e.g. Internet Explorer, Mozilla Firefox, Google Chrome)
 - Silverlight 4 plug-in (to run ArcGIS Explorer Online)
- Esri Global Account

Note: Since ArcGIS Explorer Online runs entirely over the internet, all you need is a Web browser to use it. If you have never used this application before you may be prompted to install the Microsoft Silverlight plug-in. You must sign in to your Esri Global account if you want to save the map you create in this lesson.

Background Information:

Sweatshops are factories where employees are placed in a highly demanding and often times dangerous work environment. Employees are given longer than normal working hours, little to no rights and are provided with very little pay as compensation. Although a number of laws are aimed at preventing sweatshops from operating, a large number still exist around the world. Many sweatshops are found in

third world countries where child labour is often employed at an even lower cost. Finished goods are produced at a fraction of the cost than they would be under regulated labour conditions and are shipped internationally to retailers around the world.

By mapping the locations of known sweatshops and the companies that employ them, one can begin to see the flow of goods throughout the world. This allows one to form a more complete understanding of the issue and provides the framework for further analysis and critical thought about the distribution of wealth in the world.

References:

- **Sweat Shops** - <http://www.halexandria.org/dward347.htm>

Note: Web sites accessed in December, 2011.

The Education team at Esri Canada makes every effort to present accurate and reliable information. The Web sites and URLs used in this lesson are from sources that were current at the time of production, but are subject to change without notice to Esri Canada. It is recommended that teachers test all links within the Web GIS lesson prior to students working through the individual lessons. The views expressed in the above article are solely those of the author and are not endorsed in any way by Esri Canada.

Getting Started:

1. Print a copy of the article titled “Sweat Shops”. A link to this article has been provided in the **References** section above.

Part A: Individual Identification

1. Take a look at the “Sweat Shops” article and circle any **locations** that are mentioned. Be sure to also number each location that you circle so that when you have finished reading, you can count the total number of locations that were circled.

Q. How many locations did you find in the article?

2. On a separate piece of paper, make a list of the locations you have found in the article. Make sure to include both the name of the location, and its associated number. You may use the following excerpt as an example:

“Almost all soccer balls used in the US²⁴ are imported. Major soccer ball manufacturing countries: Pakistan²⁵, China²⁶, and Indonesia²⁷. Between 1985 and 1995, the soccer ball industry greatly increased production in countries where children make leather hand-stitched balls. In countries like Pakistan²⁸, children may work 12 hour days for very little pay. (Source: International Labor Rights Fund)”

24	US	
25	Pakistan	
26	China	
27	Indonesia	
28	Pakistan	

Part B: Group Work

3. Get together with your classmates in groups of two to four students. Compare your answers to the previous question and come to an agreement on how many locations are mentioned in the article. You may find that you and your peers have differing ideas on what constitutes a location. Once a consensus has been reached, create a new list of your locations.

Note: Be sure to number each location in your list; however, this time do not count the same location multiple times.

Q. What was the final number of locations that your group decided on?

Q. What were some of the differences between your locations and the locations selected by your peers?

Q. Based on the group discussions, define “Location” in your own words.

4. If time permits, share your group’s total with the other groups in the class.

Part C: Mapping your Locations

Now that you have read the article and constructed a list of locations, it becomes important to make the connection between the text and the location’s physical place in the world. To do this, you will now digitally place each location on a map of the world.

5. Click on this link to access the *Spatial Journals* Web map:
<http://explorer.arcgis.com/?open=94723d2dcdbd1494fac018782a80f00d1>
6. In the top-right corner, select the **Sign In** button.
7. Sign in if you have an account. If not, you can use the **Sign up** option to create an Esri Global account for free. In the new tab that opens, select the **Create an account** button. Once your account is created, you can close this tab to return to the map and sign in.
8. Use the  toolbar to locate the first location from your list. You may have to select the correct location from a list of potential matches.
Hint: If you are having trouble finding a location, try using the internet to find additional information.
9. Once you have found the location, you will want to add it to the map as a map note. Click the  button on the pop-up that has appeared on your map and select the **Map Notes** option.

10. Repeat steps eight and nine until all the locations in your list have been placed on the map.

In some cases, the search feature may not be able to find the location you are looking for. If this is the case, you can also manually add points to your map.

- I. To do this, select the **Add Features**  button on the left side of your map display and select the **Pushpin**  option. Find the location you want to highlight on your map and click once to place the pushpin.
- II. The **Area**  tool can be used instead of the **Pushpin** tool if you wish to highlight a number of areas at the same time, such as a collection of countries.

Q. What types of clusters do you notice on your map?

11. Once all your locations have been mapped, you will now want to add some relevant information that you learned from the article to each. To do this, click once on a location that you mapped to open its associated pop-up window. Select the **Edit ▼** button from the bottom-right corner of the pop-up. In the window that appears, select the **Edit Pop-up** button.

12. In the *Edit Pop-up* window, change the **Title** to that of your location. Under the **Description** box, write a fact about your location that you learned from the article. You can also use the **Image URL** and the **Related Link** boxes to add a hyperlinked image to your pop-up.

13. You may also want to change the way your locations display on your map. Select the **Edit ▼** button again; however, this time chose the option to **Change Symbol**.

From here, you can change the way your location displays by either selecting a new symbol to use, or by altering the qualities of the symbol that is currently being used. Additionally, by selecting the dropdown menu with the heading **Basic**, you can access a number of additional symbols.

14. Try grouping similar locations together by using the same symbol for each location in a group.

Hint: Use your own judgment to decide if two locations are similar. For example, you can group together locations that are found on the same continent.

Q. What reasoning did you use to determine if locations on your map were similar?

15. Now that you are finished, **Save**  your map. Give your map an appropriate title, summary and a few tags that will help others find your map in a search.

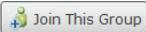
Part D: Creating a Presentation

In this section, you will create a presentation that demonstrates the locations you have mapped.

1. Switch to Presentation mode by selecting the  tab at the top of the page.
2. Click once on the slide to begin creating your presentation.
3. Within the slide, pan around the map by using your mouse or by using the Search bar. Navigate to one of the locations that you mapped in the Part C. Give the slide an appropriate title. When you are finished, click once on the **unlock**  icon to **lock**  the slide. Locking the slide will prevent you from making changes accidentally.
4. Select the **Add Slide**  icon to add a new slide to your presentation. Repeat steps one to three for each of the other locations that you added to your map. You may wish to create slides that feature a group of similar locations as well. If you want to make changes to a slide which you have already created, simply open it by selecting the slide's thumbnail at the bottom of the page, and clicking the **unlock** icon.
5. Once all your slides have been created, change their order so that the presentation tells your own story about sweatshops.. You can change the order that your slides display by dragging-and-dropping their thumbnails at the bottom of the Web page.
Hint: You may wish to order them based on themes such as the flow of goods, the distribution of wealth, the location's geographical position, or the type of location (country/city/area).
6. When you are finished, **Save**  your map and presentation.
7. Use the space provided below to write a dialog that could help someone who is viewing your presentation to understand what it is they are seeing. Make sure to give reasons as to why you ordered your slides the way you did.

Extension Exercise: Sharing your Map and Presentation

Now that your map is saved on *ArcGIS Online*, you may wish to share it with your peers. This section can only be done if your teacher has created a group for the class. For more information on creating a group, visit the following link: <http://www.esri.com/software/arcgis/arcgisonline/demos/video5>

1. Once your map is saved, open a new tab in your Web browser and go to <http://www.arcgis.com/home/> . Select the **Groups** tab from the top of the page and type the name of your class group into the box near the upper-right corner of the Web page.
2. Select your group from the results list and click on the  button. Once your teacher has accepted your request to join, you will be able to share your map with this group.
3. Now, return to your map in *Explorer Online* and select the  button. In the window that appears, you can choose to share your map either publically or have it limited to only your class group. Once you have shared your map, you will also have access to the URL links for your map and presentation. Share your map with your class group.
4. Compare your map with the maps of your peers.

Q. What differences do you notice between the various maps?

Acknowledgements

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