

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.com Map Viewer**, 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 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)
- Esri Global Account: <https://www.arcgis.com/home/signin.html>

Note: You must sign in to your Esri Global account if you want to save the map you create in this lesson. If you don't have an account, create a **Public Account** here: <https://www.arcgis.com/home/signin.html>

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://bit.ly/anAvqA>

Note: Web sites accessed in October, 2012.

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

1. 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.

2. 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.

1. Click on this link to access the *Spatial Journals* Web map: <http://bit.ly/TwbF2X>
2. Click on the **Open** button and select **Open in ArcGIS.com map viewer**.
3. In the top-right corner, click **Sign In**.

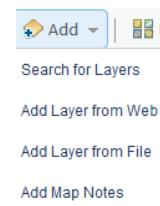


Note: If you do not have an account, you can create a free **Public Account** -

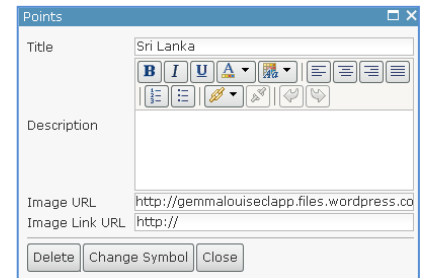
<https://www.arcgis.com/home/signin.html>. Once your account is created, you can close this tab to return to the map and sign in.

4. Use the search bar to locate the first location from your list. You may have to select the correct location from a list of potential matches.
5. Once you have found the location, you will want to add it to the map as a map note. Click the **Add** button and select the **Add Map Notes** option.

Hint: If you are having trouble finding a location, try using the internet to find additional information.



6. In the *Create Editable Layer* dialog box, name the layer **Sweatshops** and then click on **Create**.
7. You should now see a list of features in the left side of the screen. Select a point feature (stickpin, pushpin or cross) with your mouse and then click on the map to place it where you want.
8. A *Points* dialog box/pop-up will appear where you can add a title, description and image URL to your point. Click **Close** when you are done adding the information.
9. Repeat the steps 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.

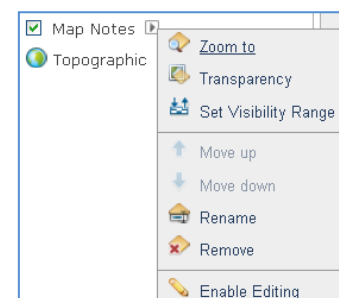
- I. If you have the *Add Features* box activated just select the point feature (pushpin, stickpin or cross) you want and then click on the map to place it where you want. Add the information to the *Points* box and click **Close**.
- II. The **Area** feature can be used if you wish to highlight a number of areas at the same time, such as a collection of countries.



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

Editing Your Features

10. Once all your locations have been mapped, you will now want to edit the symbol or description in your pop-up. To do this, click on the **Show Contents of Map** button and then click on the arrow next to **Map Notes** and select **Enable Editing**.
11. The **Edit** button will now appear at the top of the page. Click on the **Edit** button to activate editing capabilities.


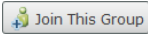



12. Click on the feature you want to edit. The pop-up will appear.
13. Click on the **Change Symbol** button to edit the symbol. Select the symbol you want and then click on **Done**.
14. When you have completed all the edits, click **Close** in the pop-up window.
15. Now that you are finished, **Save** your map. Give your map an appropriate title, summary and a few tags that will help others find your map in a search.

Extension Exercise: Sharing your Map

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://bit.ly/QIXU7z>

Note: *If you are using a *Public Account*, all groups are public. Private groups are only available with a subscription account.

1. Once your map is saved and your teacher has created a group for the class, 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 and select the  button. In the window that appears, share your map to your class group.
4. Compare your map with the maps of your peers.

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

Acknowledgements

The Education team at Esri Canada would like to extend a special thank you to Mark Lowry from the Toronto District School Board for his assistance with the development of this lesson.