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**Teaching with Historical Film Clips**

**Strand:** Geography

**Topic**: Spatial Thinking and Skills

**Content Statement**: Globes and other geographic tools can be used to gather, process and report information about people, places and environments. Cartographers decide

which information to include and how it is displayed.

Non-fiction film clip

Handy (Jam) Organization. (1940). *Caught Mapping (1940)*. Retrieved from

 <http://archive.org/details/CaughtMa1940>.

This video goes into depth about how road maps are drawn, field-checked, and printed. It shows specifically how it was done in the 1940s. The video clip is about 9 minutes long.

Background Knowledge

Mapmaking dates all of the way back to the early river civilizations we have been studying. The first evidence of maps were found in the middle east and were etched into clay tablets in Babylonia. They depict the earth as a flat, circular disk. Chinese maps were more advanced, accurate, and detailed than those that came out of the middle east. By 200 BC, the Greeks understood that the earth was a sphere. In 150 AD, Ptolemy came up with a series of projections and a coordinate system that is still used today. During the Middle Ages, maps incorporated many religious themes, and were not as practical and cartographic as they had been. Mercator created a way for mariners to sail by following a fixed rule called a rhumb line in the 16th century. Following this, Newton tried to explain why the earth was not a sphere, but actually a spheroid, due to the strong centrifugal forces at the equator. Finally, in the 19th century, the introduction of the metric system allowed for a simpler and more universal language for creating maps. Today, aerial photography, computers, electronic distance-measuring instruments, and applications of space science allow for new ways for cartographers to create maps for people to use.

Lanius, C. (2003). *History of Mapmaking*. Retrieved from

 <http://math.rice.edu/~lanius/pres/map/maphis.html>

Supplementary Sources

Jasiak, A. (2012). The Canadian Cartographic Association. *Careers in Cartography*.

 Retrieved from <http://www.cca-acc.org/careers-4.asp>

This source can be used for additional information about the work of cartographers and different aspects of their jobs. It provides insight into how cartographers choose what needs to go on maps and what does not. This source also has links to other information about cartography, including how maps are produced. This will be a more updated website than the information explained in the video.

PowerPoint presentation about *The History of Maps and Mapmaking.*

This PowerPoint gives students an in-depth look at the history of maps and mapmaking. It begins with a description of different kinds of maps, including many pictures and examples. The PowerPoint then goes into covering different terms students should know regarding maps. From there, it walks students through the history of maps and mapmaking, from very early times, all of the way up to modern maps and mapmaking. This PowerPoint even goes into the future of mapmaking and what cartographers are looking at today in terms of how they create maps. Lastly, this resource discusses maps as a scientific language and goes through the five “D’s”: Description, Details, Direction, Distance, and Designation.

Barber, P. (2013). *Animated History of European Mapmaking.* British Library.

 Retrieved from http://www.bbc.co.uk/history/british/empire

 \_seapower/launch\_ani\_mapmaking.shtml

This is an animation of the history of mapmaking specifically in Europe. Students are able to interact with this animation and look closely at different maps, beginning with Ptolemy and ending with present day. Each subcategory has 3 details which students can explore and use to gain a better understanding of how maps have developed over the years. While it is specific to Europe, students can see what cartographers do and see how cartographers have changed what is important to include on maps over time.

Core Questions

1) How have maps developed over time?

2) Describe some of the features cartographers feel are important to include in their

 maps.

3) Compare and contrast cartography in the 1940s to how it is done today. (Think

 specifically about maps vs. using a GPS to get from place to place)

4) Why is it so important to keep maps up-to-date?

5) How can we gather information about people and their environments by reading

 maps?

6) Think about different types of maps (topographical, road, population) and compare

 and contrast the information portrayed and what cartographers chose to include on

 these maps.

Historical Thinking/Extension

Using what you know now about maps, create a map of the city or town of your choosing. You, as the cartographer, have some choices to make as to how you want the information on your map to be displayed, as well as what information you are going to include. A few requirements: You must include at least 10 miles surrounding the center of the town or city, in order to get a better idea of the topography of the surrounding area. Additionally, you must include roads as well as a key to explain the symbols on your map. Incorporate some of the signs and symbols from the video, such as the road detour signs if applicable. Think about some of the maps you saw in the PowerPoint and interactive animation. You may include pictures of people or places if that will help the audience understand what is being portrayed on the map.