

Lesson Plans



Starbucks Geography

Michael Robinson 2009

Houston High School

Germantown, Tennessee

Starbucks Geography Summary

Overview

There are five lessons designed to teach basic geographic concepts. Each lesson uses Starbucks Coffee to help illustrate the main concepts. All five lessons require the use of computers and the internet, and students will use Keynote (Mac) or PowerPoint (PC) to create professional quality maps.

Basic Objectives

- 1- The student will construct and analyze histograms, choropleth maps, graduated circle maps, and cartogram maps.
- 2- The student will define scale and explain how scale is understood at a local, state, national, and international level.
- 3- The student will define a model, create a model, test a model, and apply a model.
- 4- The student will compare and contrast different cultural regions.
- 5- The student will examine the difference between developed and developing countries.

National Geography Standards

- 1- How to Use Maps and Other Geographic Representations, Tools, and Technologies to Acquire, Process, and Report Information From a Spatial Perspective*
- 3- How to Analyze the Spatial Organization of People, Places, and Environments on Earth's Surface*
- 4- The Physical and Human Characteristics of Places*
- 5- That People Create Regions to Interpret Earth's Complexity*
- 6- How Culture and Experience Influence People's Perceptions of Places and Regions*
- 18- How to Apply Geography to Interpret the Present and Plan for the Future*

Grade Level

9-12 High School (The lessons could be modified to be used in Middle School)

Time

There are five separate lessons which can be used at various times during a school year.

Starbucks Mapping: 4- 55 minute periods.

Starbucks Scale: 1 or 2- 55 minute periods

Starbucks Location: 4- 55 minute periods

Starbucks Culture: 2- 55 minute period

Starbucks Agriculture: 1 or 2- 55 minute period

Materials Needed

Starbucks Geography Keynote for Mac or PC

Student Mapping Activity (Keynote or PowerPoint)

Starbucks 2009 Excel Spreadsheet

Starbucks Geography Handouts

U.S. Quarters Keynote for Mac or PC

Starbucks Mapping

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Order	Task
Day 1 1	Introduce and discuss the differences between each of the four types of maps. Slides 1-9 from the *StarbucksGeographyPresentation.pdf . Make sure to use the page numbers at the bottom of the actual slide. Do not go by the pdf page numbers.
2	Explain how the same statistics can be mapped differently using a choropleth map. Have the students look at the three choropleth maps of the 2004 Presidential election to see how a map can be favorable, unfavorable, and neutral to President Bush's reelection bid. It is important when looking at a map to look closely at the legend to see how the data is divided. Slides 10-15
3	Continue the introduction of the four types of maps. Use the Canada maps (Slides 16-17) to illustrate how the same data can be mapped on a choropleth map and on a graduated circle map. Have the students discuss the pros and cons to the two types of maps. Use the China maps (Slides 18-19) to illustrate how a graduated circle map should look.
4	Complete the introduction of the four types of maps by showing two examples (Slides 20-21) of cartograms.
5	Use the maps of Australia (Slides 22-26) to review the dot, choropleth, and graduated circle maps. Have the students compare and contrast the three maps and explain which type of map is best to show the number of Starbucks located in Australia.
6	Introduce the assignment to the students. The students will construct a graduated circle map and a choropleth map. They will answer questions concerning the maps. They will print out on one page the two maps and the two question slides. Slides 27-33.
7	Discuss how to construct a graduated circle map. (Slides 34-38)
8	Discuss how to construct a choropleth map. (Slides 39-46) To complete the choropleth map the students will need to construct a histogram. Discuss how to construct the histogram and then how to divide up the data into different categories. (Slides 42-43). Hand out to the students copies of slides 41 and 42. The students will use the rest of the class period completing the histogram. The students will need to have the histogram completed and the categories determined by the next class period.
Day 2 9	The students will use the computer to download the <i>Mapping Activities</i> document from the class web site. The document will have the four slides the student will need to complete and directions for how to construct the graduated circle map and the choropleth map. The students should be able to complete either the graduated circle map or the choropleth map by the end of day two.
Day 3 10	The students will continue working on the two maps. By the end of day 3 the students should have both maps completed and start working on the questions comparing and contrasting the dot, choropleth, and graduated circle maps.

Starbucks Mapping

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Order	Task
Day 4 11	The students will print out their completed work (see Slide 33). The teacher will have the students share their opinions of which of the maps is best in showing the number of Starbucks per state. Either of the optional activities could be started at the end of this class period.
12	<i>Optional Activity</i> - The students can construct a cartogram map. The students should have a printed copy of the graph paper to draft out their map. In order to complete this activity the students will need at least one additional class day. Slides 47-55
13	<i>Optional Activity</i> - The students can construct a choropleth map for the state of Tennessee. The students will use slides 56-58 to complete the activity.

Starbucks Scale

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Lesson Outline

Order	Task
Day 1 1	Introduce the lesson by explaining scale. Use slides 61-68 to explain and discuss how maps at different scales affect one's perception. For example, if you only look at a map of the United States, then one might assume deaths by cancer is not high in Maryland. However, deaths by cancer is very high in parts of the state, especially some neighborhoods of Baltimore (Slides 62-65).
2	After discussing scale as it relates to the Starbucks maps on slides 66-68, explain the purpose of the lesson by discussing slide 69. Students will create a world map, a United States map, a state map (Tennessee), and a local map (Shelby County, TN) to illustrate the importance of scale when looking at various statistics, in this case the number of Starbucks.
3	Use slides 70-72 to discuss how Starbucks has been a global company. For slide 72 the discussion can be on globalization since you have Japanese tourists in a Spanish city, standing in front of a Starbucks, an American company.
4	Slides 73 and 74 gives the directions and analysis for the assignment. The students will either construct a histogram in Microsoft Excel (slides 75-78), or construct a histogram using the graph (slide 79) and the Starbucks statistics (slides 80-81).
5	Once students have completed the histogram and determined the categories for the maps, the students will work on the map (slide 82) and complete the map and analysis questions (slide 74) for homework. Also, the student will use Google Maps to help locate the Starbucks found in Shelby County. This will be done as part of their homework.
Day 2 6	Discuss the students' answers to the analysis questions and the patterns found on the maps.

Starbucks Location

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Order	Task
Day 1 1	Use the <i>50Quarters.pdf</i> or <i>50Quarters(Keynote)</i> from the CD to define and discuss the word “model” and to discuss and explain the model examples (Slides 1-7* from the <i>50Quarters.pdf</i> or <i>50Quarters(Keynote)</i>). *Slide numbers are at the bottom of each slide.
2	Distribute to the students the <i>U.S. Quarters Model handout</i> and the copy of sixteen different quarters (slides 89 and 90 from the <i>*StarbucksGeographyPresentation.pdf</i>). Have the students complete the chart on the handout and create a model for a U.S. quarter. <i>Answers to the handout:</i> All U.S. quarters will have: state name, date it became a state, <i>e pluribus unum</i> , and the date the quarter was first minted. A U.S. quarter should have at least one of the following: famous person, place, event, state cultural symbols, nicknames, flags, map, motto, landscapes, and famous buildings. Use slides 27 and 28 from the <i>50Quarters.pdf</i> to help the students develop the model for U.S. quarters and review the answers to the handout.
3	Once the students have completed the model distribute <i>Testing the Model for U.S. Quarters (Slide 93)</i> . Have the students view the remaining U.S. quarters (slides 32-65 from the <i>50Quarters.pdf</i>) to see if they fit within the model. Discuss with the students any states which they feel may not fit the model they developed. Models are not perfect. There may be exceptions.
4	Optional Activity -Have the students create a U.S. quarter for Washington, D.C. Their design should adhere to the model they developed for U.S. quarters. (slides 66-67 from the <i>50Quarters.pdf</i> or <i>slide 94 from *StarbucksGeographyPresentation.pdf</i>) When finished with this activity you can close out of the <i>50Quarters.pdf</i> .
5	Now that the students understand models, they will develop a model for Starbuck locations. Distribute to the students <i>What is a Model?</i> handout (slide 96). The students will create a model for where a Starbucks will locate. In developing the model the students will: 1) analysis statistical data for existing Starbucks in Shelby County, TN. 2) use Google Maps Street View to describe where each of the Shelby County Starbucks are located. 3) determine the threshold and range for Starbucks by using scatter charts that have the population of Tennessee cities which have Starbucks. 4) view state dot maps of where Starbucks are located. Students should notice that the majority of Starbucks are located in or near metropolitan areas. 5) look at Starbuck locations in urban areas in Tennessee to see the relationship between population, income, and transportation routes, especially major highways and interstates.

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6	<p>Distribute copies of the handouts shown on slides 97-98. Students will complete these handouts to compare all the Starbucks in Shelby County, Tennessee. Use slides 99-105 to demonstrate how to use Google Maps Street View. This will allow the students to see the types of buildings and landscape surrounding each Starbucks (example found on slide 102). Use slide 106 to help explain the role foot traffic plays in the location of some Starbucks.</p> <p>Either have the students complete the observation handouts for homework or use the rest of Day 1 and Day 2 to complete the handouts.</p>
Day 2 7	<p>Students will have the completed observation handouts for all the Starbucks in Shelby County. Discuss with the students what the Starbucks locations have in common.</p>
8	<p>Introduce the terms <i>threshold</i> and <i>range</i>. Use slide 108 to discuss the difference between a service with a high threshold and range compared with a service which has a low threshold and range. The goal is to determine a threshold and range for a typical Starbucks.</p>
9	<p>Use slides 109-113 to discuss threshold and range. Have the students guess which services are found in each city. They should be able to explain the reasons for their choices.</p>
10	<p>Use slide 111 to review the answers to slide 109. Once students have seen the correct answers have them discuss the answers they got correct and the ones they missed. Have the students explain why they may have missed some of the answers. It is expected that students would not correctly answer all of the locations.</p>
11	<p>Have the students discuss the location of Starbucks nearest to Loretto. Have them answer the questions: 1) Where are most of the Starbucks located?, 2) What do most of the locations have in common?, and 3) What advantage does Athens, Decatur, Franklin, and Murfreesboro have over Florence?</p> <p>Possible answers: 1) Most are located near large metropolitan cities, i.e., Huntsville and Nashville. 2) Most are located near major interstate highways. 3) Florence does not have interstate highways near it. It is not near a larger city like Huntsville. However, Florence does have a large enough population for a Starbucks, and it would not be surprising if it eventually did open up a Starbucks.</p>
12	<p>Have the students determine what a threshold and range would be for Starbucks located in Tennessee. Distribute to the students copies of handouts found on slides 115 and 116. Use the scatter chart on slide 117 to help discuss how many people a city may need to have to support a Starbucks. The scatter chart only has cities in Tennessee with 1 to 5 Starbucks.</p>
13	<p>Have the students work on the Threshold and Range handout.</p> <p><i>Additional Handout-</i> A copy of the handout on slide 118 can also be used to help determine the number of Starbucks a state with a particular population can support. Use slides 119 and 120 to discuss the number of Starbucks per state in the United States.</p>

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14	Complete Day 2 by showing slides 121 to 127. Have the students note where Starbucks are located on each of the slides. Have them look for similarities in the locations regardless of the state. Use slides 128 and 129 to focus back on the Starbucks located in Tennessee.
15	Students now have sufficient information to complete the <i>Starbucks Model Location</i> Handout (slide 96). They should complete the handout for homework, including testing their model. Use slide 130 to show how to locate a Starbucks in an individual state.
Day 3 16	Discuss with the students their list of characteristics for the location of a Starbucks. Have the students discuss and answer the questions on slide 132. <i>Possible model answers:</i> <ol style="list-style-type: none"> 1. The population threshold may be higher than 15,000 people in most cases. 2. The income level may be higher than \$35,000. 3. The city should have major highly traveled highways / interstates. 4. Starbucks are often found in busy downtown pedestrian areas, large airports, and large college campuses. 5. Starbucks are located in commercial areas with easy access by automobiles. 6. Starbucks are located so that people can drive in and drive out in a short amount of time. They do not have a very large range. People are not going to drive very far out of their way to buy coffee. The location has to be near commuter routes. The location must be convenient.
17	Discuss how their model held up when they tested it with other states. (slide 133)
18	Have the students determine the number of Starbucks found in SEC cities. Students will use their model and the statistics from slide 135 to help answer the questions on slide 136. Students should be given a copy of slide 136. This is a short activity to have students predict where Starbucks will be located. The answers to the questions are also found on slide 137 and 138.
19	Students will determine where in Tennessee a new Starbucks should open. Distribute to students copies of slides 139 to 142 and 144. The students will need computer access to complete the handouts and determine which city would be the best city for a new Starbucks. The students will complete the handouts during class and finish for homework. <i>Alternative</i> - Give the students a copy of the chart from slide 143 already completed. This will save time, and an alternative if there is no access to computers.
Day 4 20	Discuss with the students their top five choices of where to locate a Starbucks in Tennessee. Use the chart on Slide 145 to discuss which cities would be the best choices and which would be the worst. Possible answers are found on slide 148.
21	<i>Optional Activity</i> -Have the students create a Power Point, Podcast, or Movie. The assignment and directions are on slides 150-151. Use handouts from Slide 152-153.

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22	<p>Have students compare the locations of various services with the locations of Starbucks to better understand the locations of Starbucks in a large urban area. This will help students better understand and test their location model for Starbucks.</p> <p>Distribute the handout from slide 156. Use slide 154 to discuss the location of various services in Shelby County. Have the students write down their best guess on slide 156 to the various services found in Shelby County, and then use slides 157-159 to discuss the correct answers.</p>
23	<p>Use slide 160 to discuss where the Starbucks are located in Shelby County. The majority are located along two main commuter roads (Poplar Avenue going east to west and Germantown Road going north to south). Also, the Starbucks are not located in the areas of Memphis with the lowest income levels (north and southwest Memphis; these areas are some of the poorest areas in the entire state).</p>
24	<p>Distribute the handouts on slides 161 and 162. Have the students work in small groups to determine the Best, Worst, and Endangered locations. Students will use their location model for Starbucks to help determine the best answers for the handout.</p>
25	<p>Once students have finished the handout from slide 162, discuss the possible answers for the best, worst, and endangered locations. Possible answers are also on slide 163.</p> <p>Finally, discuss with the students the image found on slide 164. Ask them why Starbucks can be successful in some locations and unsuccessful in others. Does the model they created help with understanding why some will fail and some will succeed?</p>

Starbucks Culture

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Lesson Outline

Order	Task
Day 1 1	The purpose of the lesson is for students to understand why most Starbucks are found in urban and suburban areas. The students will explain what role culture plays in the locations of Starbucks. The first day will have the students reading the article <i>Life in America's Far Flung Suburbs</i> . They can either read the entire article or the first two pages (slide 166). As they read the article, the students will compare and contrast what is in the reading with where they live. They will write their comments in the box next to the readings. The article reading should take 15-20 minutes. The entire article is saved as a PDF as <i>Life in America's Far- Flung Suburbs</i> .
2	Once the students have completed the reading, have the students share their responses during a class discussion. Use slides 167-172 to aid in the class discussion.
3	Handout a blank copy of slide 173 and the statistics from slides 174 to 176. Have the students work in groups to complete the chart. The students should be given 15-20 minutes to complete the chart.
4	Before the end of day 1 go over at least McDonalds on the handout. Ask the students why all of the locations would have a McDonalds. Possible answers would be that McDonalds provides cheap, fast, and good food. People do not have to be wealthy to buy food at McDonalds.
Day 2 5	Have the students complete the chart in their groups and then use slide 173 to show the answers to the chart. Discuss with the students the results. Possible questions would be: Why is there a Tractor Supply Co. in Collierville? Why are there no Checking Cash in Germantown and Collierville? Why are the plastic surgeons only found in Germantown and Collierville? Why are Auto Zones found in all of the cities? Why isn't there a Dollar General in Germantown when there is one in Collierville? Why is there a Wal-Mart in most of the cities but not Germantown? Why isn't there a Day's Inn in all of the locations? Why isn't there Starbucks in Raleigh and South Memphis?
6	After completing the chart and discussing the answers, the students will answer the questions on slide 177 in a 4-5 paragraph essay.

Starbucks Agriculture

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Lesson Outline

Order	Task
Day 1 1	Introduce the lesson by using slides 179-183 to explain where Starbucks obtains its coffee. For slide 184 have the students write down reasons why there would be no Starbucks in Ethiopia.
2	Use slide 185 to show where Starbucks buys its coffee and where Starbucks retail stores are located. Have the students discuss the maps and possible reasons for some countries' being colored red.
3	Handout to the students a blank copy of slide 186. Have the students use the internet to complete the chart. Once they have completed the chart the students should answer the question <i>Why do countries that grow coffee for Starbucks not have a Starbucks store?</i>
Day 2 4	Go over the answers (Slide 186) to the chart with the students and have them discuss their answers to the question.