

6 **Assignment 47 - “US Population Growth”**

8 Lesson Overview

20 Population growth in the United States and the world will continue to
32 present challenges to this generation of leaders, and leaders of future generations;
50 i.e: 2030’s, 2040’s, and on into the future. In this lesson, you will examine some
65 population data and read some articles on the topic. You will complete a graph and
73 write about population growth based on your learning.

85 Google Sheets is like Microsoft Excel. It is a spreadsheet application that
97 lets you enter data in an organized way, and generate charts (graphs) that
101 correspond with the data.

111 In this assignment, you are going to do the following:

- 118 • complete the data table that was started
- 127 • note, and round population values to the nearest million
- 136 • observe the chart changing as you enter additional data
- 146 • note trends in population change over a 100 year period
- 157 • stylize the charts you generate with titles, font, color, background, etc...
- 170 • copy/paste charts from the spreadsheet to a new document you will create
- 182 • take notes and answer questions posed about the population data & articles

- 195 • write an essay of about 250-350 words discussing the challenges posed by
205 population growth, along with past solutions and possible future solutions
207 you envision

208 Resources

222 You will use five files to complete this lesson. All of these assignment files
228 begin with the name “Assignment 47.”

229 Procedure

- 236 1. Log in to your Google™ Drive.
- 251 2. Tip: If there is space available in the lab, you can use two adjacent
262 computers to make doing this assignment easier. While logged into your
273 Google™ Drive account on one computer where you will complete the
285 assignment steps (this document), and the other to view the instructions. If
298 you’re working on a single computer with a large screen, you can arrange
304 the two windows side to side.
- 318 3. Open the US Population Growth spreadsheet. Note that a **green** icon is used
333 in the upper-left corner to remind you that you are working on a spreadsheet.
- 348 4. Examine the way the data has been organized and entered so far. You will
361 need to continue entering the population data this way for each decade. A
373 web site has been suggested for you to use (see next step).

- 391 5. Click on the web site link in cell H1. Once on this new web site, you will
406 need to scroll down a bit to use the light blue colored chart shown above.
- 419 6. Make sure the button for “POPULATION CHANGE” is selected in the top-
425 left corner of the web site.
- 440 7. Along the bottom of the page there is an series of upward-pointing arrow
454 markers. Click on the year 1940. Note the population shown for that year.
468 Round the value to the nearest million. Go back to the spreadsheet. Enter the
474 rounded value in cell B6.
- 486 8. Continue switching between the census web site, and the spreadsheet, where
500 you are entering data, until you have all the data entered. You should notice
510 that the bar and line charts are changing as you go.
- 525 9. Explore the bar chart and line chart with your mouse. Use the buttons that
540 appear at the top of each chart to make changes to the appearance (text, font,
555 color, etc...) until you get them the way you like. You can also make the
565 charts themselves bigger or smaller by dragging their corner handles.
- 578 10. Think about what the table and the charts show. Population growth has
592 many implications for us. Create a new browser tab in one of the following
607 ways: File → New Tab Press command+T. Press the “+” in the tab bar.
- 620 11. Create a new Google™ document. Pull down the Format menu to Line
623 Spacing... to Double.

636 12.Type your name, period, and date information in the top left corner.

648 13.Press return. Click on the Center-alignment button in the toolbar.

659 14.Type the title: “Population Growth - Some Things to Consider” (or
661 something similar)

677 15.Open the .pdf files Assignment 47 - Article 1, Article 2, Article 3 one at a
688 time. Read each article and make notes about ways population growth
704 affects us now and in the future. You can use a Cornell Notes™ type format
719 to keep your notes organized. You can see a sample of the notes table by
731 returning to the Google Drive Lesson Plans and click on “Sample Pop
743 Growth Cornell Notes - Anker”. To create your own notes table, follow the
748 steps in the following procedure:

- 761 1. Open a new tab and create a new blank Google Document
- 775 2. On the first line, type a title for your notes, then press return
- 791 3. Pull down the Table menu → to the grid, and create a 2 x 8 grid
- 805 4. A two column table appears. Type the first note category you plan to
811 write about, for example: Medical Care
- 827 5. Press the tab key. The insertion point will blink in the next cell to the
839 right. Type your detail information in this cell. The cell will enlarge
845 downward, as needed as you type.
- 862 6. Press the tab key to go to the next row and return to the first column.

867 7. Continue entering your notes.

880 16. Think about aspects of your everyday life that could be affected by
891 population growth: places where people live, foods people eat, ways people
905 travel, jobs people do, where people of different ages go to school or get
918 medical care. Give examples of challenges the human race has faced in the
930 past and solutions that have been invented to meet each challenge. Propose
941 new possible challenges and possible solutions. Use details to support your
950 claims. Here's an example about transportation impact population growth:

961 *“With more and more people moving into cities, roads and freeways*
975 *will become more crowded and it will take longer to get places by car.*
987 *More and more roads, freeways, and parking lots will need to be*
997 *built, covering over farmland and wilderness lands. There will be*
1009 *more demand for carpool lanes and toll lanes where people have to*
1022 *pay to drive on the freeway. More people may start riding buses and*
1036 *trains, and fares may go up. More people may have to stand instead of*
1048 *sit in buses and train cars because they will be so crowded.*
1060 *Technology such as GPS traffic systems could help drivers avoid the*
1070 *worst traffic jams, and help public transportation riders know when*
1076 *their bus or train will arrive.”*

1091 17. The anchor (sample) paper that follows on the next page is an excerpt (a
1104 small part) of what I wrote. Discuss at least three types of impacts
1119 population growth will have on us in the future. If you feel you need more
1129 research information, consult other web sites on Population Growth. Take
1144 notes as you read other articles. Make sure you use your own words and do
1158 not plagiarize. When you have finished your article, and are ready for it to
1173 be read, place a check in the box next to your document in your Google
1188 Drive, and then click on the Share icon, and then share it with your teacher.
1211 If your teacher is Mr. Anker, share it to anker.henry@gmail.com.