

Quiz 3

-- GOOGLE EARTH --

1. Set up a data table

Create a new Excel spreadsheet with the latitude/longitude locations that you collected from last week's lab (Places I'd like to go/Places I've been).

- The first row of your Excel file should contain an appropriate heading for each column.
- The first two columns should contain your 10 latitude and longitude locations, in decimal degrees.
- Create a 3rd column that contains the name of each location.
- Create a 4th column that ranks each of these locations on a scale from 1-5, reflecting any criteria that you like. For example, you can rank your locations based on the order that you enjoyed visiting them (5 being enjoyed most, 1 least), or the order that you would visit if given the chance (5 most, 1 least), or the amount of \$\$\$ each costs to visit, or the time it takes to travel to each, etc.
- And one last thing: Google Earth has a quirky way of importing data, that you probably didn't notice in the last lab - the last line of your .CSV file is not imported. To overcome this quirk, copy/paste the last row of your dataset so that it repeats at the end of the file. Having this extra row will allow all 10 of your actual locations to be imported properly.
- Create a Quiz3 folder on \\geobase and save your file as a .CSV format file (name it Quiz3.csv).

2. Import points into Google Earth

Next import your dataset into Google Earth Pro. Launch Google Earth and first uncheck any datasets that automatically show when you open the application. Then import your points, use a style template to setup your data:

- Assign your location column as the name label.
- Set colors by field, using your ranked data column as criteria. Set the number of buckets to 5. Assign a color ramp from red-blue,

red with a rank of 5, and blue with a rank of 1. Assign subfolders for each bucket, name each folder appropriately.

3. Format balloons

Expand the folder containing your new datasets and check that each one was assigned the appropriate color. Also make the following formatting changes to each balloon by editing the description properties:

- Make both the latitude and longitude text bold. To make text bold, you use the same approach as you used for italicizing text, but bold is represented by a “b” instead of an “i”.

4. Add a legend

Something new: your data needs a legend so that you can better identify what the colors represent.

- In the Instructor’s folder, you will find a Word document named Legend.doc. Copy the file to your Quiz3 folder on \\geobase and open it up.
- You should see a basic shell for a legend, which you can modify to reflect your own dataset. Give your legend a title. Add text in the long text boxes as indicated. The text should be similar to the names that you labeled each sub-folder in Google Earth. Also change the color of the small boxes to correspond with each ranking. If you need help with any of this Word stuff, let Bridget know.
- Now save a screen capture of your legend. To do this, hit the Print Screen key on your keyboard, then open up Paint (located in the Accessories folder). Select Paste. You can then use the dashed box icon to crop the portion of your screen capture that you want to save to a file. Save this cropped part as a JPG (name it “mylegend.jpg”) in your Quiz3 folder. If you know how to make a transparent background in Paste, go ahead and do so. Otherwise, leave you file as is.
- Lastly, copy/paste the file Legend.kml from the Instructor’s folder to your Quiz3 folder. Open this file in WordPad and replace the text “yourimagehere.jpg” with the name of your legend image, “mylegend.jpg” (without the quotes). When you load this file into Google Earth, it will look for you legend jpg file in the same directory that your Legend.kml is stored, and display it.

- Save the Legend.kml file, making sure to save it in your Quiz3 folder. You can minimize this file for now.
- Note that the <size> tags in this file allow you to modify the size of the legend that is displayed in Google Earth. For example, to make the legend smaller, you can replace “0” with “0.5”, etc.

5. Open your legend file in Google Earth

Open your Legend.kml file in Google Earth with File → Open. Zoom in and out and notice that your legend remains in the same place in your viewing window.

- Just as an example of how the .kml file helped with placing your legend in a permanent spot, try opening your mylegend.jpg file directly with File → Open. Accept the defaults and click OK.
- What happens to your image as you zoom in and out?

- Delete (right-click, delete) your mylegend.jpg file from the Places window and also drag your Legend kml file inside your Quiz3 folder in the Places window. Save your Quiz3 folder as a .kmz file. You can then collapse any remaining folders and turn off your legend.

6. Miscellaneous fun stuff

Now copy/paste the following placemark files from the Instructor folder to your Quiz3 folder. Expand the Layers window in Google Earth and click on the Borders and Labels box. Use the provided geographic labels and borders in Google Earth, and the ruler tool, to answer the following questions:

firefox_logo.kmz:

What is the diameter of this feature in miles?

In which U.S. state is this placemark located?

herd_of_hippos.kmz

How many hippos can you fit into a pond (just kidding). What is the size of this image (length and width), in km?

Pick an average hippo and measure it's size, in feet:

white_mexican_horse.kmz

Where (city, country) is this placemark located?

What is the size of this feature (from head to tail) in miles?

earthquake?.kmz

What is the latitude and longitude, in degrees-minutes-seconds, of the center of this placemark?