q1

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VisionZ; very useful!; do watch them! (qgis2 not 3) 
the whole thing https://www.youtube.com/watch?v=
   KjvFil3o4y8&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4
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⋄01 - open and view data https://www.youtube.com/watch?v=KjvFil3o4y8&list= PLNCPalajQvg7wQvzf3fM8f0Z51MK186Q4&index=1

♦ 04 - Working with attributes

https://www.youtube.com/watch?v=G6UeiGg2Cp8&list= PLNCPalajQvg7wQvzf3fM8f0Z51MK186Q4&index=4

♦ 07 - Basic vector styling https://www.youtube.com/watch?v=b-OMQ7dnVJk&index= 7&list=PLNCPalajQvg7wQvzf3fM8f0Z51MK186Q4

♦ 03 - print composer

https://www.youtube.com/watch?v=YnqbC1hkfnk&list= PLNCPalajQvg7wQvzf3fM8f0Z51MK186Q4&index=3

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other references

- http://www.youtube.com/results?search_query=qgis
 not sure, any of these useful in particular? email listserv
- opretty good and comprehensive; in-depth but easy to navigate reference http://www.qgistutorials.com/en/
- ♦ http://www.qgistutorials.com/en/docs/teach_qgis.html
- Good howto, references
- http://hub.qgis.org/projects/quantum-gis/wiki/
- · QGIS FAQ

http://hub.qgis.org/projects/quantum-gis/wiki/How_do_I_do_that_in_QGIS

misc: basics

- oneed all gis (and other data), not just .shp
- interpret everything you show or drop it!
- · (if it's not worth your discussion, why is it in the map?)

a tip of the week...

- ♦get yourself a hi-res screen (if you don't have one yet)
- ⋄it immensely helps working with any research, especially gis
- ♦it's just 150\$ or so
- ♦ 2560 x 1080 or larger would do, say https://www.newegg. com/Product/Product.aspx?Item=N82E16824025340
- \diamond what maters is # of pixels not so much size of the screen!

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gui
pretty standard gui
♦ first thing is to add data...
say US states; where do i get it?

    ogoogle "US states shapefile" and we get

♦ https://www.census.gov/geo/maps-data/data/
  tiger-cart-boundary.html
♦ click 'State,' and get
♦https:
  //www.census.gov/geo/maps-data/data/cbf/cbf_state.html
and download say 'cb_2016_us_state_20m.zip'
· reliable; always think how reliable is the source
♦ in general, trust the government, "major companies",
  universities, etc
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adding data

- click first icon on the left toolbar "line with nodes" for vector data
- "checkboard" is for raster/pictures (seldom used)
- ♦ and we got US in the middle: the map
- grab it and move around with "hand" pointer
- and a layer on the left-you can uncheck it
- · and right click to pop up more information

zooming, identifying

- · either click the map with appropriate tool
- · better yet, draw a rectangle to achieve appropriate zoom
- once zoomed in, let's identify features
- · select tool "arrow with 'i"' 'i' for info/identify
- ·click on some polygon, say TX and it'll pop up information
- ♦ a useful thing is to right click on layer and do "zoom to layer"

underlying data

- ♦ there is always a table (database) underlying a map
- ⋄right-click on the layer, and open "open attribute table"
- ⋄now, let's make a selection
- · and you can highlight some rows in the table
- or do it in the map: "arrow with rectangle"
 - -either click or draw a rectangle
- ·to deselect use "arrow with 'no' sign"

loading data

https://docs.google.com/uc?id=

1xJDhcRCkgv7k4tNCa72Oog5bohV6dTB2&export=download

play around

- ♦ add more layers, move them up and down
- ⋄turn on the layers and off (check tick)
- oright click and see the data (table)
- · remember i was saying there is always data under the map?

your first thematic map

- ♦ thematic maps are the key thing in this class: thematic.pdf
- ♦ nj_counties-Properties-Style and from drop-down:
- ♦ Column: "POP2010"

"Graduated"

- ♦ Color ramp: can just leave Blues
- ♦ and hit "Classify" button
- omany ways to do the classification: more soon
- · if you're curious—just poke around with classifications
- · easy to experiment and figure things out there
- ♦ and hit "OK" to see the map-viola!

print a map: Print Composer

- ♦ Project-New Print Composer
- ♦ NJ is tall: on the right "Composition" and do "portrait"
- ♦ left: blank icon "Add New Map" and draw a rectangle

♦ left: icon with arrows "Move Item Content" to adjust view

- right: "Item properties" change scale to adjust zoom
 left: legend button "Add new legend"
- · right: **uncheck** auto-update and beautify it:
- · drop items with minus sign; edit by double clicking it
- ♦ top: on the left: Composer-Export as Image
- · probably jpg is fine, just increase resolution to say 600dpi · http://www.qgistutorials.com/en/docs/making_a_map.html and
- *http://docs.ggis.org/2.0/en/docs/user_manual/print_composer/print_composer.html