

Name _____

Date _____

LAB 1B: Get the Picture? *Response Sheet*

Directions: Record your responses to the lab questions in the spaces provided.

Where'd we leave off ...

Variable Types

- Is height a numerical or categorical variable? Why?

- Is gender a numerical or categorical variable? Why?

- List either the different categories or what you think the measured units are for height and gender.

Which is which?

Use the code's output to help you complete the following:

- Write down 3 variables that you think are *categorical* variables and why.

- Write down 3 variables that you think are *numerical* variables and why.

Data Structures

- What information does the `str` function output?

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- Were you able to correctly guess which variables were categorical and numeric? Which ones did you mislabel?

Visualizing data

- Which function, either bargraph or histogram, is better at visualizing categorical variables? Which is better at visualizing numerical variables?

We have options

- Describe the distribution of weight. Make sure to describe the *shape*, *center* and *spread* of the distribution.

- How did including the option `nint = 3` change the histogram?

- Does setting `nint = 3` impact how you would describe the shape, center and spread?

- Try other values for `nint`. What value produced the best graph? Why?

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- How did including the groups argument in your code change the graph?

Do males and females have similar heights?

- Can you use this graphic to answer the question at the top of the slide? Why or why not?

- Is grouping numeric values, such as heights, as helpful as grouping categorical variables, such as texting & driving?

Do males and females have similar heights?, continued

- Do you think males and females have similar heights? Use the plot you create to justify your answer.

On your own:

- Choose one variable from the cdc data, make a graph, and use the graph to describe how drive_text use differs with this variable.