

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Turning Observations into Data

### Part 1

Name the 6 variables that can be recorded from the picture on your card. What variable names could you use to represent these? Record your answers in the correct column below.

#### Numerical Variables

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#### Categorical Variables

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### Part 2

Using the variable names you chose in Part 1, create a data table and use the first row to record the information about the person on your card.

Compare your card's values to your team members' and add their data to your table.  
If there are extra cards left over, record those observations as well.


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### Part 3

Consider the following research question:

**What determines the number of friends a person has on social media?**

Which variables do you think might be related to the number of friends a person has on social media?

*Example: Sport Played*

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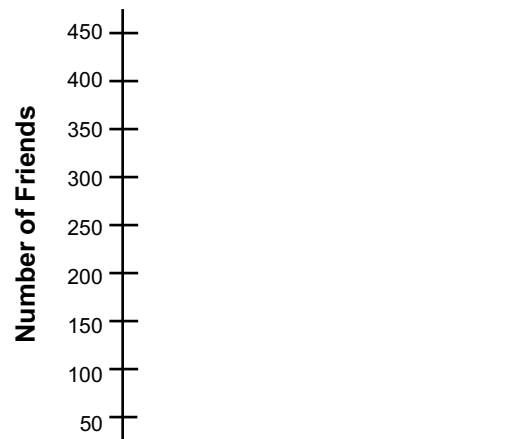
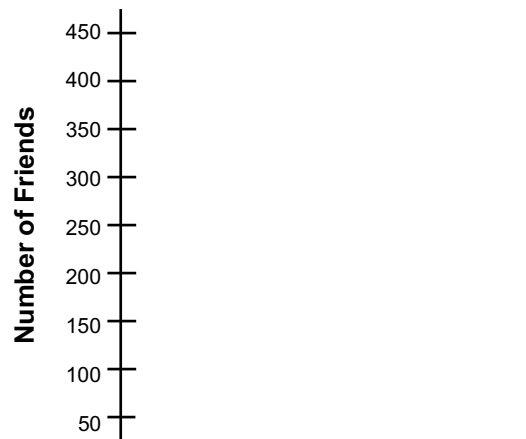
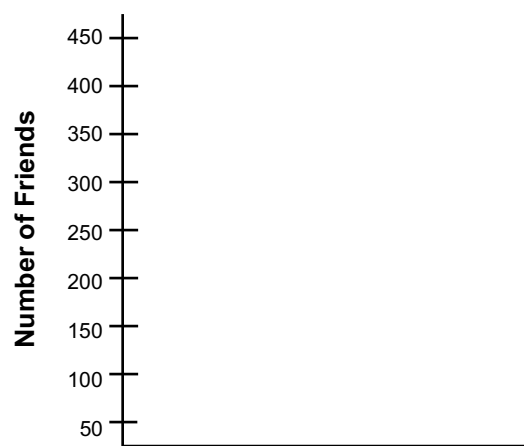
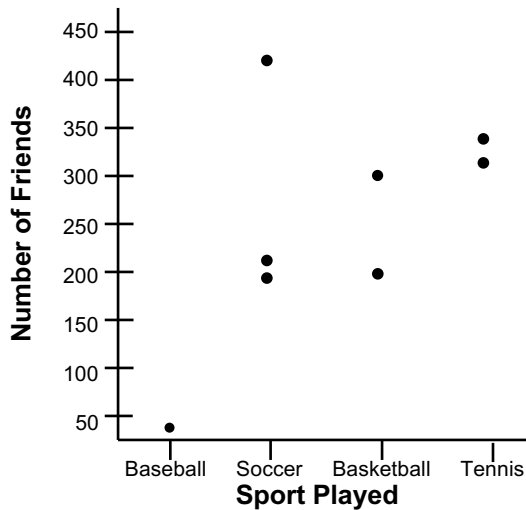
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Create a few plots by hand using the data from Part 2 to investigate this question. Each plot should include 2 variables – # of friends, and one of the variables you selected.

*Example plot:*



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### Part 4

Which variable showed the strongest relationship to the number of friends?

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Describe how the two variables are related.

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Do you believe that the number of friends a person has on social media can always be determined by the variable you selected? Explain.

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Can you think of another variable (not necessarily given in the pictures) that might impact both the number of friends AND the variable you selected? Give an example and explain how it might impact each of the variables.

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