Name:	Date:
	ata, Code & RStudio sponse Sheet
Directions: Record your responses to the lab q	juestions in the spaces provided.
So let's get started!	
Describe the data that appeared after rur	nning View(cdc):
• Who is the information about?	
What sorts of information about them was	s collected?
Data: Variables & Observations	
How are our <i>observations</i> represented in	our data?
What does the first column tell us about or	our observations?
How often did our first observation wear a	a seatbelt while riding in a car?
Uncovering our Data's Structure	

Uncovering our Data's Structure

- How many students are in our cdc data set?
- How many variables were measured for each student?

Name:	Date:

Lab 1A: Data, Code & RStudio Response Sheet

Type the following commands into the console

<pre>dim(cdc)</pre>			
nrow(cdc)			
<pre>ncol(cdc)</pre>			
names(cdc)			

- Which of these functions tell us the number of observations in our data?
- Which of these functions tell us the number of variables?

Syntax matters

names(CDC)

Names(cdc)
NAMES(cdc)
names(cdc)

Run the following commands and write down what happens after each. Which does R understand?

Name:	Date:
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Lab 1A: Data, Code & RStudio **Response Sheet**

Syntax in action

Which one of these plots would be useful for answering the question: Is it unusual for students in the CDC dataset to be taller than 1.8 meters?

```
histogram(~height, data = cdc)
bargraph(~drive_text, data = cdc)
xyplot(weight~height, data = cdc)
```

Do you think it's unusual for students in the data to be taller than 1.8 meters? Why or why not?

On your own:

What is public health and why do we collect data about it?

How do you think our data was collected? Does it include every high school aged student in the US?

How might the CDC use this data? Who else could benefit from using this data?

Name:	Date:

Lab 1A: Data, Code & RStudio Response Sheet

• Write the code to visualize the distribution of weights of the students in the CDC data with a histogram. What is the *typical* weight?

• Write the code to create a barplot to visualize the distribution of how often students wore a helmet while bike riding. About how many students never wore a helmet?