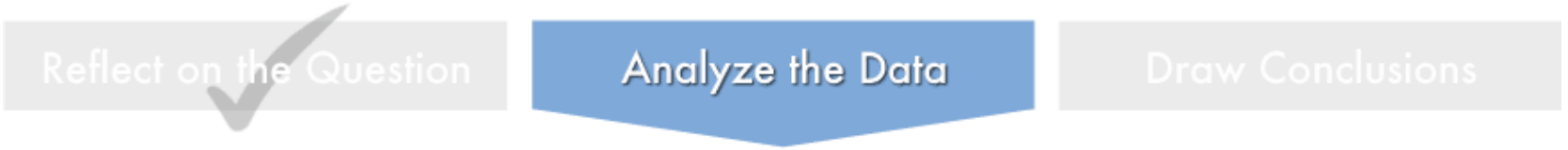

Primary Research Question

How many of the cyclists were students, how often did they ride, and what was the average distance they rode?

Analyzing the Data

In this section of lab, you will be asked to run a script and interpret your results. Since this is a practice lab and you are still becoming familiar with the R Studio environment, we are going to have you **type the code directly into the console** (or script) window. Follow the directions below.

(1/1 point)

We want to know about the **students** in the dataset. Run this code.

```
#show number of students
table(BikeData$student)
```

How many students are in the dataset?

Help

14

14

Final Check | Save | Show Answer *You have used 1 of 2 submissions*

(1/1 point)

Since we only want to work with the student data, let's **create** a new data frame that only includes students. Run this code:

```
#Pull out student data into a new data frame
student <-BikeData[BikeData$student==1,]
```

When you look in your workspace, how many variables do you see in this **new data frame**, student?

9

9

Final Check | Save | Show Answer *You have used 1 of 2 submissions*

(1/1 point)

We want to know how often the students ride. Run this code. Notice we are referencing the data frame **students** now.

Help

```
#Find how often the students ride
table(student$cyc_freq)
```

What is the most frequently observed answer?

- (•) Daily ✔
- ( ) Several times per week
- ( ) Several times per month
- ( ) Less than once a month

Final Check | Save | Show Answer *You have used 1 of 2 submissions*

(1/1 point)

We also want to know how far the students travel on average. Let's create a **vector** of just the distances. Run this code:

```
#Create vector for the variable distance
distance <-student$distance
distance
```

How is this vector "distance" described in the **workspace**?

- (•) num[1:14] ✔
- ( ) 9 variables
- ( ) 14 obs. of 9 variables

Help

Final Check | Save | Show Answer *You have used 1 of 2 submissions*

(1/1 point)

Now let's find the average distance ridden by the students, using the mean function. Run this code:

```
#Find average distance ridden
mean(distance)
```

How far do the students ride on average?

- ( ) 3.74 miles
- (•) 6.26 miles ✔
- ( ) 12.9 miles

Final Check | Save | Show Answer *You have used 1 of 2 submissions*

Help

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