Data Collection with the TI-Nspire™

Distance Time Activity

This activity is appropriate for 7th and 8th grade students. The data can be aggregated using the Navigator. If this is not available, the teacher can collect the data and enter it into the TI-Nspire document and then send the document to the students. It is designed to be completed in two class periods. You can have the students answer within the document itself or on the worksheet.

Student Worksheet

**Complete this part by** *your date goes here.*
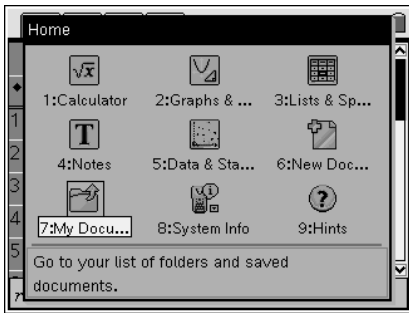**Part A.**

1.   Distance from home to school (round to the nearest tenth of a mile) _____
        If you are in a car pool, start your distance at the last stop.

2.   Time from home to school (round to the nearest minute):
        If you are in a car pool, start your time at the last stop.

| DAY	TIME
Day 1	
Day 2	
Day 3	

Average time from home to school (round to the nearest minute) _____

3.   What is your zip code? _____
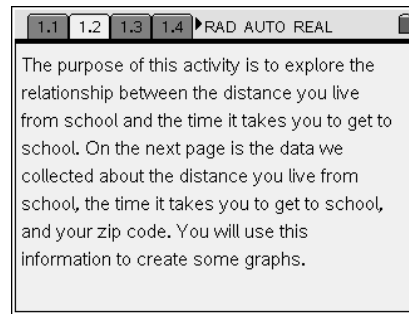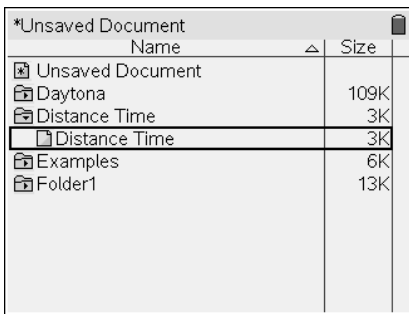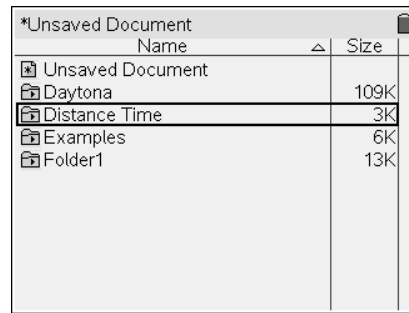
Part B

1.   Make a box plot for the average time from home to school.

2.   Make a box plot for the distance from home to school.

3.   Why is a box plot appropriate for this type of data?

4.   Which box plot shows the largest range?

5.   Why do you think this plot shows the largest range?

6.   Which box plot shows the smallest "box"?

7.   Why do you think this plot has the smallest box?
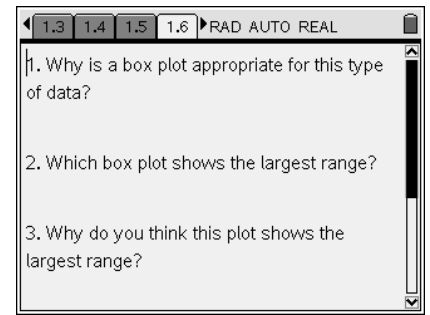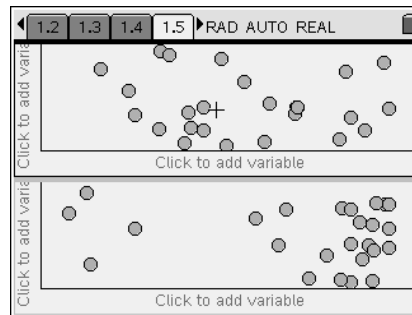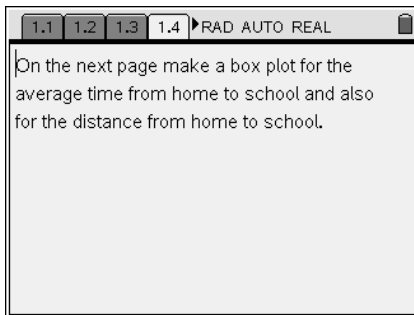
Part C.

1.   Make a histogram (use a class width of 5 miles) for the distance from home to school.

2.   Does it appear to be skewed right, left, or symmetrical?

3.   Why is a histogram appropriate for this type of data?

4.   What can you conclude about the distance you and your classmates live from school?
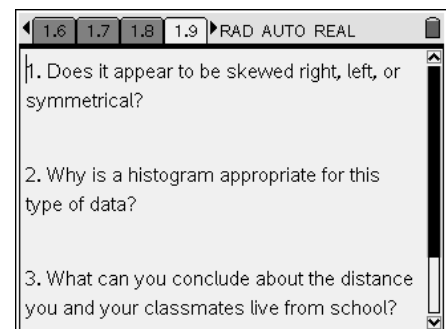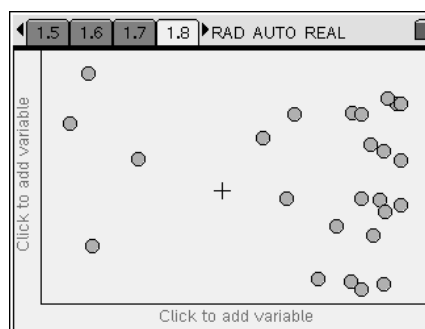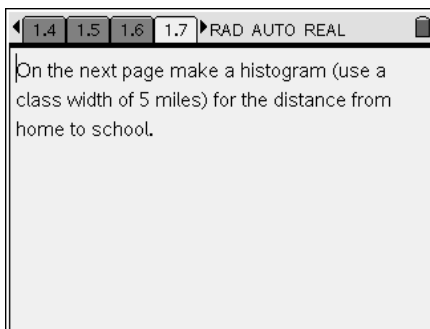
Part D.

1.   Make a histogram (use a class width of 5 miles) for the average timed from home to school.

2.   Does it appear to be skewed right, left, or symmetrical?

3.   Why is a histogram appropriate for this type of data?

4.   What can you conclude about the time it takes you and your classmates to "drive" from home to school?
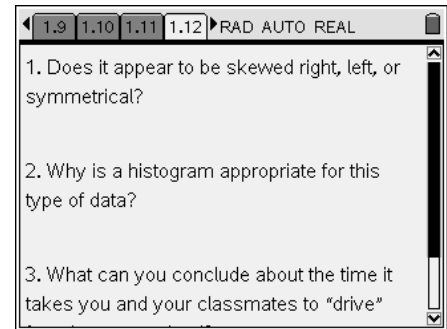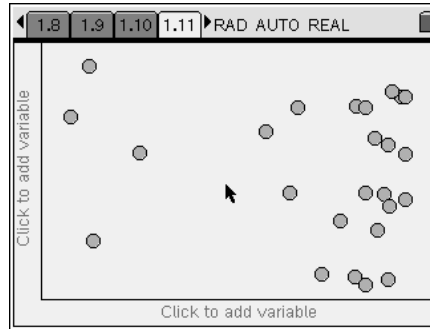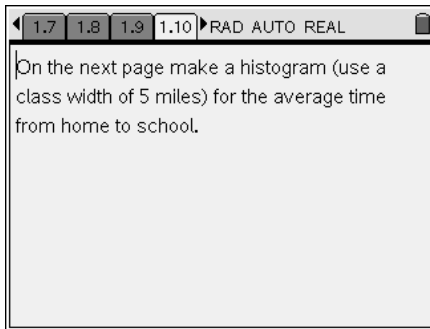

Part E.

1.   Make a scatter plot for distance from home to school and average time. Decide which variable should go on the horizontal axis and which variable should go on the vertical axis. Support your decision here:

3.   Does the graph resemble a straight line?

4.   What can you conclude about the correlation between the distance you live from school and how long it takes you to "drive?"
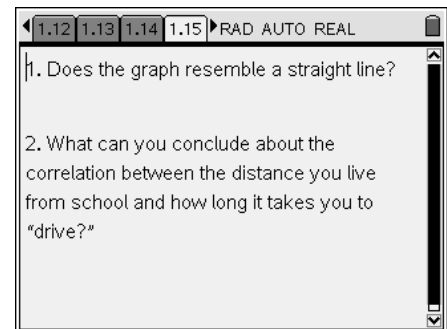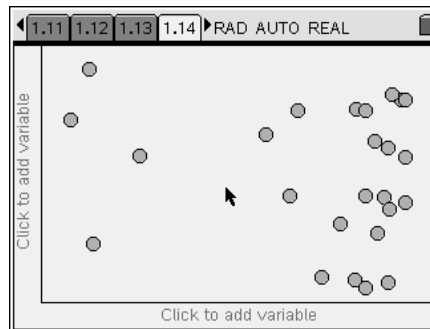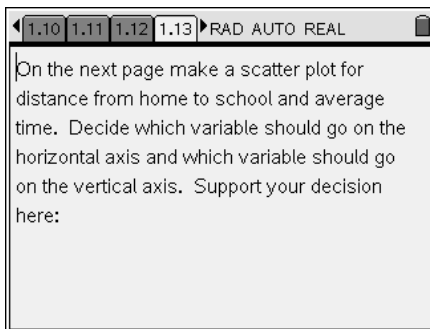
Part F.

1.   Make a dot plot graph for the zip codes.

2.   Why is a dot plot appropriate for this type of data?

3.   Is there another type of graph that would also be appropriate for this type of data? If so, which one?

4.   What can you conclude from the zip codes and dot plot in relationship to where you and your classmates live?
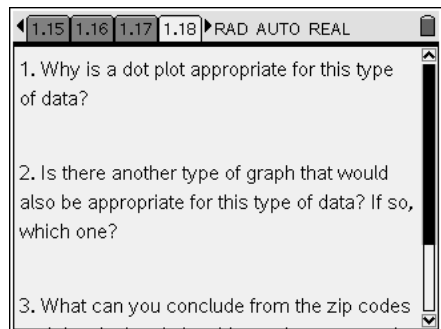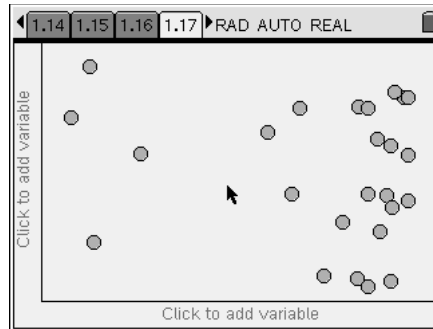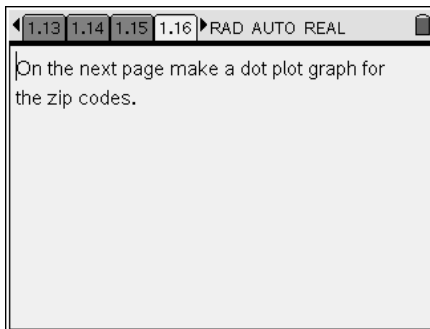
Part G.

1.   In your opinion, which type of graph(s) best gives a visual representation of where you and your classmates live relative to school? Why?

2.   In your opinion, which type of graph(s) best gives a visual representation of how long it takes you and your classmates to "drive" from home to school? Why?

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