Line of Best Fit: Tongue Twisters Lab

Objective:

Do you know how fast you talk? How fast do your friends talk? Try saying these tongue twisters: *The sunshade sheltered Sarah from the sunshine, The Sopchoppy Shoe Shop sells shoes, A cricket critic cricked his neck at a critical cricket match,* and *Lavonne lingered, looking longingly for her lost laptop.*

You will time people as they say a tongue twister. Then, you will use scatter plots and graphs to help investigate and display relationships in the data that you collected. Using your function, you will make predictions.

Materials:

- Calculator
- Stopwatch
- Graph paper

Tongue Twisters:

a. "One smart fellow, he felt smart. Two smart fellows, they felt smart."
b. "Three witches wished three wishes, but which witch wished which wish?"

Directions:

1. List each group member in order.

    1. _____

    2. _____

    3. _____

    4. _____

    5. _____

    6. _____

2. Form a semicircle.
3. Using the stopwatch, time Person #1 saying the tongue twister to Person #2.
4. Record the time to the nearest tenth of a second on the table below.
5. Repeat steps 3 and 4 by adding the next person to the chain. Be sure each person speaks one after the other.

Number of people	Time (to the nearest tenth of a second)
1	
2	
3	
4	
5	
6	

DON'T FORGET TO GIVE THE DATA TO DR. BELL BEFORE YOU GRAPH!!

6. Draw a scatter plot for all of the data. Be sure to choose the appropriate scale and label the axes.

7. Write an equation for the line of best fit for the data. SHOW YOUR WORK!

       Points used (_____, _____) and (_____, _____)

Questions:

1. Estimate the number of seconds for 30 people to say each tongue twister.
   a.

   b.

2. Compare the lines for each tongue twister. Explain any differences.