Tongue Twister Graphing

Pick 2 tongue twisters (one long & one short) from the following:

1. I wish I could wash my Irish wristwatch.
2. Boldly, Blake bit the big black bear. Bitten by Blake, the black bear bled black-bear blood.
3. Three witches wished three wishes, but which witch wished which wish?
4. A kiss is the anatomical juxtaposition of two orbicularis oris muscles in a state of contraction.
5. Wendell's red-webbed gremlin wed Gwen's green iguana, while Gwen and Wendell wept.

Do the following for each of tongue twister (on the same set of axis):

- During the first round, only one person will say the tongue twister.
- During the second round, the first person & a second person will say the tongue twister.
- During the third round, the first person, the second person, and a third person will say the tongue twister.   etc….
- Time how long it takes to complete each of the individual rounds and place the time on the chart.
- Graph the # of people (round) on the x-axis and the time on the y-axis. (use 2 different colors to distinguish the tongue twisters)
- Answer the questions on the back of this page

# of people	Short Tongue Twister	Long Tongue Twister
1		
2		
3		
4		

Questions about your graph:

1. Should a dot-to-dot line be drawn to connect the data, or should a straight line be drawn through the middle of the data?

2. Even though you did not measure the time required for 18 people to say the tongue twister, how can you use the graph to predict this time?

3. How many people could say the tongue twister in 70 seconds?

4. Explain why one line is steeper than the other.

5. How can we figure out the number of seconds the longer tongue twister takes per person?

6. Write a formula for the total time it takes for a group of people to say the tongue twister. Use this equation to predict the time it would take for 100 people to say the tongue twister.

7. Draw a sketch of what you think the data would look like if the first person said the tongue twister once, the second person twice, etc.