

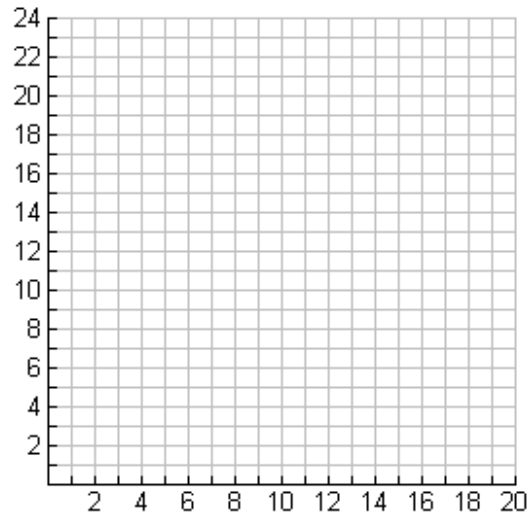
Activity - Twizzler Regression

Name: _____

Directions:

- Measure the length of your twizzler in centimeters and record under $b=0$.
- Take a bite, measure, write under $b=1$.
- Continue taking bites and measuring until gone.
- Graph your data on the scatterplot provided. Label your axes.

| bite | length |
|------|--------|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |



1. What type of correlation exists within your data? Explain.
2. Use a calculator to find the Line of Best Fit. _____
3. Using your equation...
 - a. What is the slope of your line? _____
 - b. What does it represent in this situation?
 - c. What is the y-intercept of your line? _____
 - d. What does it represent in this situation?
4. Use your Line of Best Fit to predict the amount of Twizzler that would be left after 3 bites.
5. Use your Line of Best Fit to predict the amount of Twizzler that would be left after 30 bites. Does this make sense?
6. Predict how many bites have been taken if 7 cm remain.
7. Your answers may be different from your peers. Why? Please explain in at least 2 sentences.