

### Activity Description:

This activity asks students to inventory the books in their home and to make a scatter plot based on each book's number of pages and the width of its spine.

### Materials Needed:

- Graphing Materials
- Books
- Ruler

### Steps:

1. Collect several different books from around your house.
2. Count the number of pages in each book and measure the width of the book's spine.
3. Make a scatter plot comparing the page count to the spine width.
4. Make a line of best fit or a trendline.
5. Make a formula in  $y=mx+b$  format.
6. Answer these questions:
  - a. Based on your formula and your graph, how thick would a book be with 300 pages?
  - b. Based on your formula and your graph, how many pages would you find in a book with a spine that's 1.5 centimeters wide?
  - c. Try to find a book that has about 300 pages in your house and find how wide the spine is. Does it fit your prediction?
  - d. Try to find a book that has a spine that's about 1.5 centimeters wide in your house and find out how many pages it has. Does it fit your prediction?