

Problem 1.1 Finding Patterns and Making Predictions

- A. Conduct the bridge-thickness experiment to find breaking weights for bridges 1, 2, 3, 4, and 5 layers thick. Record your data in a table.
- B. Make a graph of your (*bridge layers, breaking weight*) data.
- C. Does the relationship between bridge thickness and breaking weight seem to be linear or nonlinear? How is this shown in the table and graph?
- D. Suppose you could split layers of paper in half. What breaking weight would you predict for a bridge 2.5 layers thick? Explain.
- E.
 1. Predict the breaking weight for a bridge 6 layers thick. Explain your reasoning.
 2. Test your prediction. Explain why results from such tests might not exactly match predictions.

active math
online

For: Virtual Bridge Experiment
Visit: PHSchool.com
Web Code: apd-1101

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