

Bridge Test Lab

Test two paper bridges, record clip counts, and compare how they perform.

K-2-ETS1-3 "Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs."

NAME _____

DATE _____

Teacher: this page is run aloud. The script and answers are on the guide page.

1 TEST DATA

A

B

2 COMPARE

More?

Less?

HOW TO RUN THIS PAGE

Set two same-height books the same distance apart for each bridge. Use two identical sheets of paper, one left flat for Bridge A and one folded like a fan for Bridge B. Students record each test count from 0 to 9, then use the data to identify a strength or a weakness in this clip-holding test.

Students never read directions on this sheet. Read each part's script aloud, then each prompt, giving think time before students mark.

PART 1 • TEST DATA

SAY “We are testing two paper bridges across the same two books: Bridge A is a flat sheet, and Bridge B is a fan-folded sheet. I will add paper clips, one at a time, to the middle of each bridge and stop at nine clips, even if a bridge still holds. How many clips did Bridge A hold, and how many clips did Bridge B hold? Write each number in its box.”

- Box 1 (beside A): **Bridge A's class test count, from 0 to 9.**
- Box 2 (beside B): **Bridge B's class test count, from 0 to 9.**

PART 2 • COMPARE

SAY “Look at the two numbers you wrote. Which bridge held more clips, and which bridge held fewer clips? Write A or B in each box. If both numbers are the same, write S in both boxes.”

- Box 1 (beside More?): **A if Bridge A's count is greater, B if Bridge B's count is greater, or S if the counts are equal.**
- Box 2 (beside Less?): **A if Bridge A's count is smaller, B if Bridge B's count is smaller, or S if the counts are equal.**

WHAT TO ACCEPT

Accept the class test counts from 0 through 9 only, because testing stops after nine clips. If the counts match, accept S in both comparison boxes, since neither bridge held more or fewer clips in this test.