

Bridge Test and Redesign Evidence

NAME _____ DATE _____ PERIOD _____

Fixed Samples — Predict Before the Reveal

The three fictional classroom samples use the same staged load and stop rule. Study only the visible systems before you predict.

SAMPLE	VISIBLE SYSTEM
A	Flat beam; two main rails; taped card deck
B	Triangulated side frames; cross-braced deck
C	Curved/segmented sides; narrow support contact

Before revealing the results, predict which sample will complete the highest stage and cite one visible clue:

Fixed-data boundary: This packet is the complete route. The module does not supply an approved live-test kit or physical-test protocol. Do not improvise with textbooks, desks, scales, loose weights, or student load placement.

Reveal and Compare

Your teacher reveals this fictional result card after everyone records a prediction.

SAMPLE	MAXIMUM COMPLETED STAGE	STOP EVIDENCE
A	2	Center deck reached displacement mark before Stage 3
B	5 safe cap	No detached joint or displacement stop at cap
C	3	One support contact slipped before Stage 4

Sample I analyzed: [A / B / C]

Maximum completed stage: [] Stop evidence: []

First failed or limited element: []

Which comparison is fair, and what variable is still uncontrolled?

One pattern and one exception across the three results:

Word bank: stage · stop evidence · displacement · support contact · variable · limitation

Individual Failure Analysis and Redesign

Result evidence I used:

One specific redesign:

Why that change should affect the result:

What I would measure in the next test:

Use this frame: Sample [code] reached [stage/result]. I would change [specific feature] because [evidence]. In the next test, I would measure [measure].

Career Role and Real-World Limits

Worker who would review this result next:

Additional evidence a real project would require:

One limit of the classroom prototype:

Use this frame: A [role] would review [evidence] next, but a real project would also require [additional evidence].
This classroom model cannot prove [limit].