

# BridgeForge — Concept Poster

*Print this and pin it up — an at-a-glance map of the BridgeForge cast and the ideas each one carries. Come back to it whenever you want to remember who teaches what.*

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## Meet the cast — and what each one teaches

| Character      | What they carry                                                                                            |
|----------------|------------------------------------------------------------------------------------------------------------|
| <b>Truss</b>   | Math↔Science bridges — causal-evidential connection (measurement + replication; both sides need numbers)   |
| <b>Arch</b>    | Math↔Art bridges — proportion-aesthetic connection (golden ratio + symmetry; math you can SEE)             |
| <b>Cable</b>   | Math↔Music bridges — ratio-temporal connection (frequency ratios + rhythm; math you can HEAR)              |
| <b>Pier</b>    | Math↔Social-Studies bridges — data-narrative connection (statistics in history + civics; numbers + people) |
| <b>Splice</b>  | Math↔ELA bridges — structure-metaphor connection (sequence + symmetry in writing; math is the bones)       |
| <b>Girder</b>  | Math-computing bridge — order-of-operations is the same as sequence in code; math you can run              |
| <b>Rivet</b>   | Math-movement bridge — rate, angle, and trajectory; a jump is math in the air                              |
| <b>Ballast</b> | Math-health bridge — ratio, scaling, and balance; the right amount in the right proportion                 |
| <b>Strut</b>   | Math↔Cooking bridge — proportional reasoning; a recipe is a ratio you can scale up or down                 |
| <b>Trestle</b> | Math↔Gardening bridge — spatial reasoning; a garden bed is geometry you can grow                           |

## Key ideas at a glance

*The big concepts this cast helps you master:*

- Math-to-Science Bridges
- Math-to-Art Bridges
- Math-to-Social Studies Bridges
- Math-to-ELA Bridges

- Math-to-Music Bridges
  - Math-to-CS Bridges
  - Science-to-ELA Bridges
  - Cross-Curricular Design Thinking
  - Social-Emotional Learning
  - Color Theory and Combinatorics
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- **Meet the cast:** <https://sparkanvil.org/cast/bridgeforge>
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