

ChanceForge — Concept Poster

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

Spark & Anvil is a 501(c)(3) public charity. Every app, story, and book is free, forever — no ads, no in-app purchases, no tracking. Released under Creative Commons BY-NC-SA 4.0 for educational reuse.

Meet the cast — and what each one teaches

Character	What they carry
Tally the Counter-of-Outcomes	Data collection + frequency counting (the foundational "what happened, how often?" move)
Display the Picture-Maker	Graphs and visual displays (bar charts, histograms, dot plots, line graphs — turning numbers into pictures)
Center the Middle-Finder	Central tendency — mean, median, mode (the "what's typical?" question)
Sample the Estimator	Sampling, sampling distributions, inference from sample to population
Tree the Compound-Brancher	Compound events and probability trees — multiplication rule for independent events, addition for disjoint, conditional dependencies
Odds the Likelihood-Reader	Basic probability — placing a chance on the 0-to-1 scale from impossible to certain
Scatter the Spread-Reader	Spread and variability — how far apart the data is (range), not just the middle
Flipside the Other-Outcome-Counter	The complement rule — find the chance it doesn't happen and subtract from 1
Clew the Clue-Follower	Conditional probability — how chances change once you learn a new fact
Evens the Long-Run-Settler	Expected value and the long run — results settle toward the average over many tries

Key ideas at a glance

The big concepts this cast helps you master:

- Data Collection & Organization
 - Graphs & Data Displays
 - Mean, Median, Mode & Range
 - Probability Basics
 - Experimental vs. Theoretical Probability
 - Compound Events & Sample Spaces
 - Statistical Variability & Distributions
 - Statistical Inference & Prediction
 - Experimental Probability
 - Compound Events & Trees
 - Statistical Distributions
 - Data-Driven Decision Making
-

Keep exploring online

- **Play it now:** [https:// sparkanvil.org/play/chanceforge](https://sparkanvil.org/play/chanceforge)
- **Meet the cast:** [https:// sparkanvil.org/cast/chanceforge](https://sparkanvil.org/cast/chanceforge)
- **More free books:** [https:// sparkanvil.org/books](https://sparkanvil.org/books)