

DiscreteQuest — Concept Poster

Print this and pin it up — an at-a-glance map of the DiscreteQuest 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
Sortie the Set-Curator	Sets, subsets, set operations (union, intersection, difference)
Tally the Pattern-Counter	Counting principles and combinatorics (multiplication rule, permutations, combinations)
Verity the Truth-Tester	Propositional logic, truth tables, AND/OR/NOT operators
Wander the Bridge-Walker	Graph theory — Eulerian paths, Hamiltonian paths, connectivity
Coil the Self-Reference	Recursion and sequences (Fibonacci, factorials, recursive patterns)
Prime the Indivisible	Number theory — primes, factorization, modular arithmetic
Cubby the Cubby-Keeper	The pigeonhole principle — when there are more things than places, at least one place must hold two
Swatch the Border-Painter	Graph coloring — coloring connected things so no two neighbors match, with the fewest colors
Marshal the Line-Arranger	Permutations — counting arrangements where order matters (factorials, ordered choices)
Twoby the Pair-Matcher	Parity and invariant arguments — even/odd pairing that proves what's possible
Surge the Growth-Racer	Order of growth — how the work scales as a problem gets bigger

Key ideas at a glance

The big concepts this cast helps you master:

- Sets and Sorting
 - Counting and Patterns
 - Logic and Truth Tables
 - Graph Theory Basics
 - Combinatorics and Probability
 - Recursion and Sequences
 - Number Theory and Cryptography
 - Algorithm Design and Complexity
 - Elements & Principles Deep Dive
 - Cultural & Historical Context
 - Creative Process & Critique
 - Professional Practice & Careers
 - Introduction to Sets
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