

Standards Crosswalk

Common Core State Standards alignment for currently-published modules

This document maps each currently-published module in The Situation Room to the Common Core State Standards it addresses. The product is positioned as supplemental or enrichment material alongside a standards-aligned core curriculum, not as a complete replacement. State-specific framework crosswalks are available on request — contact chelst@gmail.com.

Mathematical Modeling with Probability

High School · Chapter 1 · 4 topic wrappers × 5 Building Blocks

BUILDING BLOCK	STANDARD	DESCRIPTION
BB1 — Randomness & Intuition	HSS-IC.A.2	Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation.
BB1 — Randomness & Intuition	7.SP.C.5	Understand that the probability of a chance event is a number between 0 and 1 expressing the likelihood of the event occurring.
BB2 — Formal Probability	HSS-CP.A.1	Describe events as subsets of a sample space using characteristics of outcomes, or as unions, intersections, or complements of other events.
BB2 — Formal Probability	7.SP.C.7	Develop a probability model and use it to find probabilities of events.
BB3 — Multiplication Rule	HSS-CP.B.8	Apply the general Multiplication Rule in a uniform probability model: $P(A \text{ and } B) = P(A) \times P(B A)$.
BB3 — Multiplication Rule	HSS-CP.A.2	Understand the concept of independence; the probability of A and B occurring together is the product of their probabilities.
BB4 — Simulation & LLN	HSS-IC.A.2	Use simulation to evaluate a probability model and the long-run behavior of repeated trials.
BB4 — Simulation & LLN	HSS-MD.A.1	

		Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space.
BB5 — Expected Value	HSS-MD.A.2	Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.
BB5 — Expected Value	HSS-MD.B.5	Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.

From Percentages to Algebra

Middle School · Activity 1 · 5 topic wrappers × 4 Modules

MODULE	STANDARD	DESCRIPTION
M1 — Two Offers, One Choice	6.RP.A.3.C	Find a percent of a quantity as a rate per 100; solve problems involving finding the whole given a part and the percent.
M2 — Build the Table	6.EE.A.2.C	Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems.
M3 — Discovery Pivot	6.EE.A.2.A	Write expressions that record operations with numbers and with letters standing for numbers.
M3 — Discovery Pivot	6.EE.A.6	Use variables to represent numbers and write expressions when solving a real-world or mathematical problem.
M4 — Solve, Verify, Generalize	6.EE.A.7	Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$.
M4 — Solve, Verify, Generalize	6.EE.A.2.C	Evaluate expressions at specific values to verify solutions and check work.

Standards for Mathematical Practice

All modules across both books address the following Standards for Mathematical Practice:

- MP1** Make sense of problems and persevere in solving them.
- MP2** Reason abstractly and quantitatively.
- MP3** Construct viable arguments and critique the reasoning of others.
- MP4** Model with mathematics.

Source curriculum: *Mathematical Modeling with Probability and From Percentages to Algebra* by Dr. Kenneth Chelst (Wayne State University), developed under NSF funding and used in classrooms for over a decade.