In All Probability

Grades 3-6

Benchmarks for the Sunshine State Standards
Correlation for Grades 6-8 Only

SCIENCE

Strand H: The Nature of Science

Standard 1: The student uses the scientific processes and habits of mind to solve problems.

Benchmarks
SC.H.1.3.3 The student knows that science disciplines differ from one another in topic, techniques, and outcomes, but that they share a common purpose, philosophy, and enterprise.
SC.H.1.3.4 The student knows that accurate record keeping, openness, and replication are essential to maintaining an investigator’s credibility with other scientists and society.

Standard 2: The student understands that most natural events occur in comprehensible, consistent patterns.

Benchmark
SC.H.2.3.1 The student recognizes that patterns exist within and across systems.

Standard 3: The student understands that science, technology, and society are interwoven and independent.

Benchmark
SC.H.3.3.5 The student understands that contributions to the advancement of science, mathematics, and technology have been made by different kinds of people, in different cultures, at different times, and are an intrinsic part of the development of human culture.
Strand A: Number Sense, Concepts, and Operations

Standard 1: The student understands the different ways numbers are represented and used in the real world.

Benchmarks
MA.A.1.3.1 The student associates verbal names, written word names, and standard numerals with integers, fractions, decimals; The student numbers expressed as percents; numbers with exponents; numbers in scientific notation; radicals; absolute value; and ratios.
MA.A.1.3.2 The student understands the relative size of integers, fractions, and decimals; numbers expressed as percents; numbers with exponents; numbers in scientific notation; radicals; absolute value; and ratios.
MA.A.1.3.4 The student understands that numbers can be represented in a variety of equivalent forms, including integers, fractions, decimals, percents, scientific notation, exponents, radicals, and absolute value.

Standard 4: The student uses estimation in problem solving and computation.

Benchmark
MA.A.4.3.1 The student uses estimation strategies to predict results and to check the reasonableness of results.

Strand D: Algebraic Thinking

Standard 1: The student describes, analyzes, and generalizes a wide variety of patterns, relations, and functions.

Benchmark
MA.D.1.3.1 The student describes a wide variety of patterns, relationships, and functions through models, such as manipulatives, tables, graphs, expressions, equations, and inequalities.

Strand E: Data Analysis and Probability

Standard 1: The student understands and uses the tools of data analysis for managing information.

Benchmarks
MA.E.1.3.1 The student collects, organizes, and displays data in a variety of forms, including tables, line graphs, charts, bar graphs, to determine how different ways of presenting data can lead to different interpretations.
MA.E.1.3.2 The student understands and applies the concepts of range and central tendency (mean, median, and mode).
Standard 2: The student identifies patterns and makes predictions from an orderly display of data using concepts of probability and statistics.

**Benchmarks**

MA.E.2.31 The student compares experimental results with mathematical expectations of probabilities.
MA.E.2.32 The student determines odds for and odds against a given situation.

Standard 3: The student uses statistical methods to make inferences and valid arguments about real-world situations.

**Benchmarks**

MA.E.3.3.1 The student formulates hypotheses, designs experiments, collects and interprets data, and evaluates hypotheses by making inferences and drawing conclusions based on statistics (range, mean, median, mode) and tables, graphs, and charts.
MA.E.3.3.2 The student identifies the common uses and misuses of probability and statistical analysis in the everyday world.
**LANGUAGE ARTS**

**Strand A: Reading**

Standard 1: The student uses the reading process effectively.

**Benchmark**
LA.A.1.3.3 The student demonstrates consistent and effective use of interpersonal and academic vocabularies in reading, writing, listening, and speaking.

Standard 2: The student constructs meaning from a wide range of texts.

**Benchmark**
LA.A.2.3.5 The student locates, organizes, and interprets written information for a variety of purposes, including classroom research, collaborative decision making, and performing a school or real-world task.

**Strand B: Writing**

Standard 2: The student writes to communicate ideas and information effectively.

**Benchmark**
LA.B.2.3.1 The student writes text, notes, outlines, comments and observations that demonstrate comprehension of content and experiences from a variety of media.

**Strand C: Listening, Viewing, and Speaking**

Standard 1: The student uses listening strategies effectively.

**Benchmarks**
LA.C.1.3.1 The student listens and uses information gained for a variety of purposes, such as gaining information from interviews, following direction, and pursuing personal interest.
LA.C.1.3.4 The student uses responsive listening skills, including paraphrasing, summarizing, and asking questions for elaboration and clarification.

Standard 3: The student uses speaking strategies effectively.

**Benchmarks**
LA.C.3.3.2 The student asks questions and makes comments and observations that reflect understanding and application of content, processes, and experiences.
LA.C.3.3.3 The student speaks for various occasions, audiences, and purposes, including conversations, discussions, projects, and informational, persuasive, or technical presentations.