

chart (outcome table): a type of graphic organizer that condenses and organizes data about multiple traits associated with many items or topics

Example: The following two charts or outcome tables represent the same data shown in different styles of outcome table.

Flip 1	Flip 2	Simple Event
H	H	HH
H	T	HT
T	H	TH
T	T	TT

		Flip 1	
		H	T
Flip 2	H	HH	HT
	T	TH	TT

combination: a group of objects in which order does not matter

Example: For a group of numbers being multiplied, order does not matter because 4×5 is the same as 5×4 .

consecutive: following one after another without interruption or break

Example: 4, 5, 6, 7 are consecutive numbers.

descending: arranged from greatest to smallest

Example: 10, 9, 8, 7 are written in descending order.

factorial notation: a mathematical shorthand that concisely represents the product of consecutive descending natural numbers

Example: $7! = 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$

Fundamental Counting Principle: a rule that explains if there are a ways to perform one task and b ways to perform another, then there are $a \times b$ ways of performing both

Example: You are making an ice cream sundae. You can choose one kind of ice cream: chocolate, strawberry, or vanilla. You can also choose one topping of caramel or fudge. Because there 3 types of ice cream and 2 types of topping, there are $3 \times 2 = 6$ types of sundaes you can make.

natural number: the set of positive integers $N = \{0, 1, 2, 3, \dots\}$

Example: 2 and 100 are natural numbers, but -3 and $\frac{1}{2}$ are not.

permutation: an arrangement of distinguishable objects in a definite order

Example: If I want to list the colours red (r) and blue (b), there are two permutations, rb and br .

sample space: the set of all possible outcomes of an experiment

Example: If you flip a coin, the sample space is $S = \{heads, tails\}$.

tree diagram: a type of graphic organizer in which the possible outcomes of two or more events in a given situation are listed in a tree format

Example:

