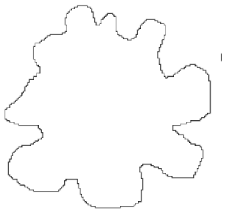
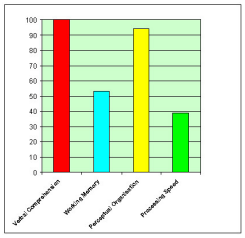
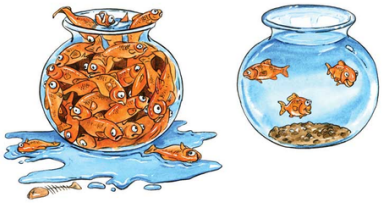
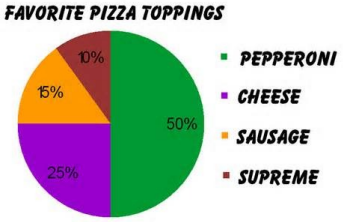
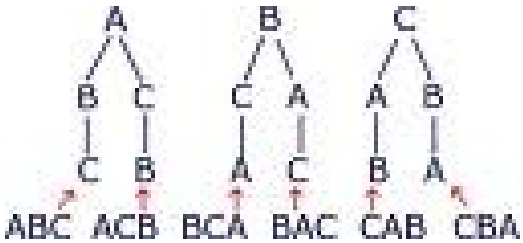
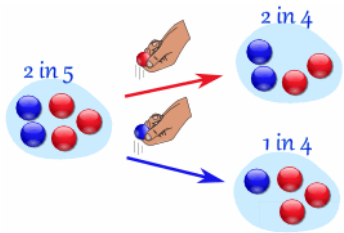
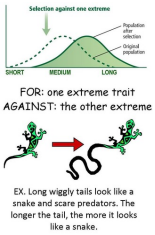
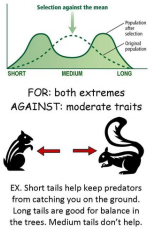
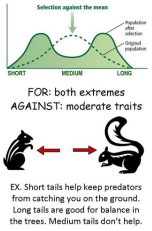
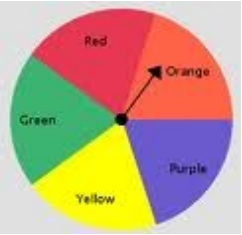
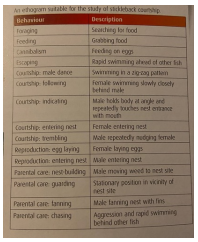
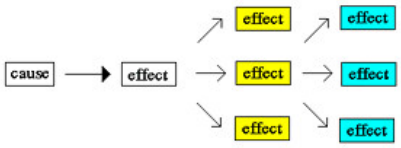
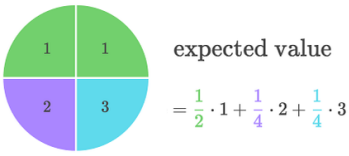
Asymmetrical	 Irregular shape.
Average	$\frac{sum\ of\ terms}{number\ of\ terms}$ Mean; Found by adding all numbers and dividing that sum by the amount of numbers included.
Bar Chart	 Chart with bars whose lengths are proportional to quantities.
Carrying Capacity	 Largest number of individuals of a population that a environment can support.
Categorical Data	blue tall BIG Data that consists of names, labels, or other nonnumerical values.

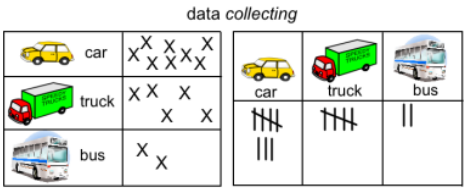
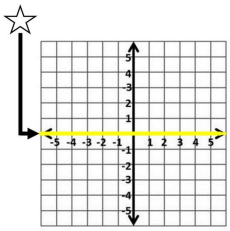
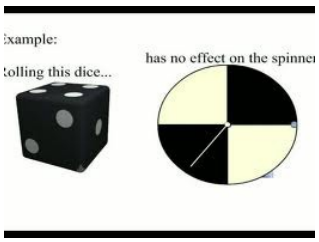
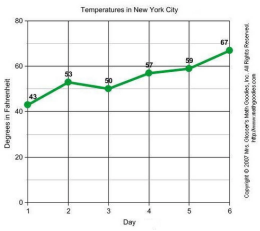
BioBox Unit 10 Math Vocabulary Dictionary

Chi-Square Test	$$\chi^2 = \sum \frac{(Observed - Expected)^2}{Expected}$$ Statistical test used to determine the probability of obtaining observed proportions by chance, under a specific hypothesis.
Circle Graph	 A graph of data where the entire circle represents the whole or 100%.
Combination	 Mixture of different people or things.
Compound Probability	$$P(A\|B) = \frac{P(A \cap B)}{P(B)}$$ Probability of 2 or more events happening.
Counting Principle	 Simple way to find the number of outcomes.

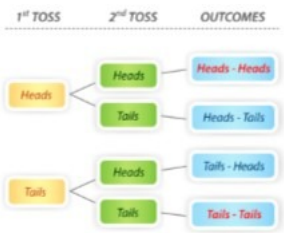
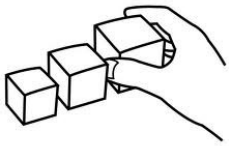
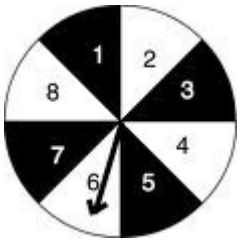
Degrees of Freedom	$df = n-1$ Number of scores that can vary in the calculation of a statistic.
Dependent Event	 Outcome of one event does affect the outcome of the second event.
Directional Selection	 Occurs when natural selection favors one of the extreme variations of a trait.
Disruptive Selection	 Natural selection in which individuals at the upper and lower ends of the curve have higher fitness than individuals near the middle of the curve (same as Diversifying Selection).
Diversifying Selection	 Natural selection in which individuals at the upper and lower ends of the curve have higher fitness than individuals near the middle of the curve (same as Disruptive Selection).

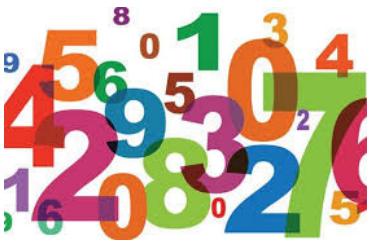
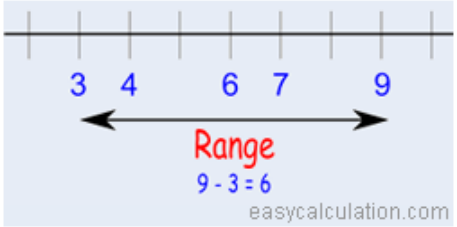
BioBox Unit 10 Math Vocabulary Dictionary

Elementary Event	 One possible outcome of an experiment.
Ethogram	 Table used to record observations of animal behavior.
Event	 Action that causes something to happen.
Expected Value	 Total benefit to be expected if a decision were to be repeated several times.
Factorial	$P = \frac{n!}{x!\,(n-x)!}\, p^x q^{n-x}$ Product of all whole numbers except zero that are less than or equal to a number.

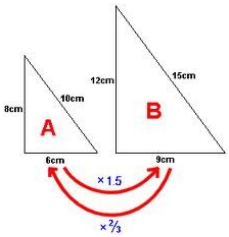
Graph	 Instrument for recording data.
Horizontal Axis	 X-axis.
Independent Event	 Two or more events in which the outcome of one event does not affect the outcome of the other event(s).
Line Graph	 Graph that uses one or more lines to show changes in statistics over time or space.
Mutually Exclusive Event	$P(A \text{ and } B) = 0$ Events A and B are mutually exclusive if they share no outcomes. Events that have no common outcome, two events that cannot occur at the same time.

BioBox Unit 10 Math Vocabulary Dictionary

Null Hypothesis	H_0 Hypothesis that there is no significant difference between specified populations, any observed difference being due to sampling or experimental error.
Outcome	 a possible result of a probability experiment. Result or consequence.
Permutation	 An arrangement of objects in which order is important.
Probability	 Likelihood that a particular event will occur.
Qualitative	 Data in the form of words.

Quantitative	 Data that is in numbers.
Random	 By chance; not planned.
Range	 Difference between the highest and lowest numbers in a distribution.
Ratio	$colon$ $4:1$ $"to"$ $4\ to\ 1$ $fraction$ $\frac{4}{1}$ Comparison of two quantities by division.
Reject	 Refuse to accept.

BioBox Unit 10 Math Vocabulary Dictionary

Relative Fitness	 Contribution an individual makes to the gene pool of the next generation relative to the contributions of other individuals.
Relative Frequency	Relative Frequency Distribution equency distributions Height in inches Frequency Relative Frequency Relative frequency (%) 61 or less 2 0.07 7 62-63 5 0.17 17 64-65 7 0.23 23 66-67 7 0.23 23 68-69 4 0.13 13 70-71 5 0.17 17 72 or more 0 0.00 0 Total 30 1 100 Ratio that compares the frequency of each category to the total.
Sample	 Part of a population.
Sample Space	 The sample space is 1, 2, 3, 4, 5, 6. Set of all possible outcomes of an experiment.
Scale	 Percentage of original size to enlarge or reduce the size of an object.

BioBox Unit 10 Math Vocabulary Dictionary

Scatter Plot

A graphed cluster of dots, each of which represents the values of two variables. The slope of the points suggests the direction of the relationship between the two variables. The amount of scatter suggests the strength of the correlation.

Significance

A critical probability associated with a statistical hypothesis test that indicates how likely an inference supporting a difference between an observed value and some statistical expectation is true.

Simple Probability

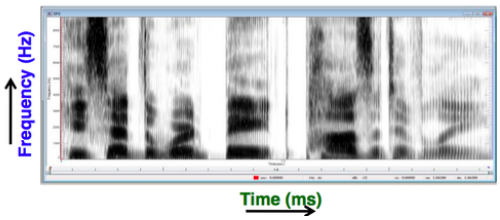
Likelihood of a single (simple) event occurring by itself.

Simple Theoretical Probability

$$\frac{\text{Number of favorable outcomes}}{\text{Number of possible outcomes}}$$

Ratio of the number of equally likely outcomes in an event to the total number of possible outcomes.

Spectrogram



In sound analysis, a three-dimensional display that plots time on the horizontal axis, frequency on the vertical axis, and amplitude (intensity) on a color or gray scale.

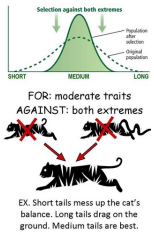
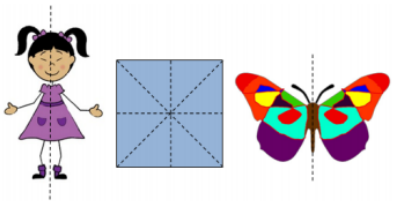
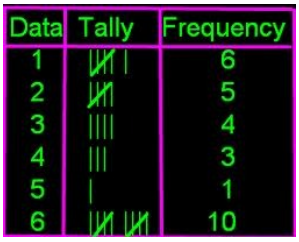
Spherical	 Shaped like a sphere.
Stabilizing Selection	 Natural selection in which individuals near the center of a distribution curve have higher fitness than individuals at either end of the curve.
Statistical Test	 Analytic tool that estimates the probability that obtained results from a sample reflect true population values.
Support	 Back up with details.
Symmetrical	 Well proportioned; balanced; the same on both sides.

Table	 Arrangement of data made up of horizontal rows and vertical columns.

Data	Tally	Frequency
1	𝍸 |	6
2	𝍸	5
3	||||	4
4	|||	3
5	|	1
6	𝍸 𝍸	10