Mind Map Activity

1. Create a mind map illustrating the fundamental concepts introduced in probability. Begin with the overarching definition of probability and then branch out to cover key concepts such as types of probability, probability rules, probability distributions (both discrete and continuous), expected value, variance, standard deviation, laws of large numbers, the central limit theorem, random variables (discrete and continuous), combinatorics, Bayes' Theorem, applications of probability, and common probability distributions. Use connecting lines and hierarchical structure to show relationships and dependencies between these concepts. Additionally, consider adding visual elements and color coding to enhance clarity and engagement."

Example of Mind Map Diagram : Like below need to submit mind maps according to the concepts mentioned in above activity

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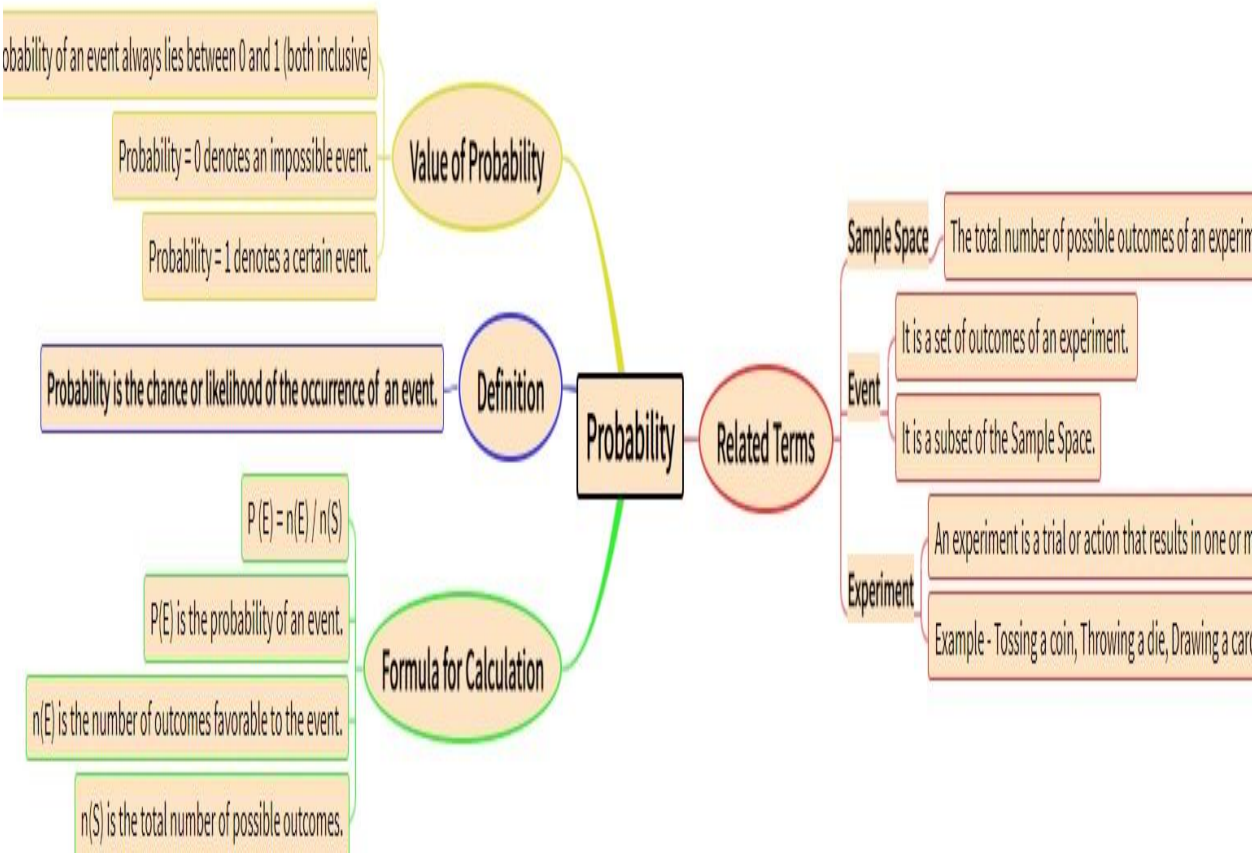

2. "Create a detailed mind map to explore the concepts surrounding Continuous Random Variables, specifically focusing on the Uniform, Exponential, and Normal distributions. Begin by defining Continuous Random Variables and then branch out to cover the Probability Density Function (PDF), parameters, characteristics, and real-world applications for each distribution. Include key properties such as mean and standard deviation for the Normal distribution. Use connecting lines and a structured hierarchy to illustrate relationships between the concepts. Enhance the mind map with visual elements, colors, and icons to make it visually engaging and informative."

3. "Create a comprehensive mind map to illustrate and interconnect the key concepts related to statistical analysis, focusing on Sample and Population, Higher Order Moments, Variance, Standard Deviation, Measures of Central Tendency (Mean, Median, Mode), and Measures of Dispersion (Variance, Standard Deviation, Coefficient of Variation). Begin by defining Sample and Population, then branch out to cover the calculation and interpretation of Higher Order Moments. Extend the mind map to include the formulas and characteristics of Variance and Standard Deviation. Further, explore the measures of central tendency, emphasizing the differences and applications of Mean, Median, and Mode. Finally, connect these concepts to Measures of Dispersion, highlighting the relationships and significance of Variance, Standard Deviation, and the Coefficient of Variation. Use visual elements, colors, and hierarchical structures to enhance the arity and comprehensibility of the mind map."