Standard ID	Standard Text	Edgenuity Lesson Name
	Reason quantitatively and use units to solve problems.	
N-Q.1.	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	Describing and Comparing Data with Dotplots and Stemplots Describing and Comparing Data with Histograms
WA.F.	Functions	
F-IF.	Interpreting Functions	
	Interpret functions that arise in applications in terms of the context.	
F-IF.4.	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.	Calculating the Least-Squares Regression Line Making Predictions from a Least-Squares Regression Line Residuals R-squared and s
F-IF.6.	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.	Calculating the Least-Squares Regression Line Making Predictions from a Least-Squares Regression Line Residuals R-squared and s
WA.S.	Statistics and Probability	
S-ID.	Interpreting Categorical and Quantitative Data	
	Summarize, represent, and interpret data on a single count or measurement variable	

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S-ID.1.	Represent data with plots on the real number line (dot plots, histograms, and box plots).	Calculating and Interpreting z-Scores Comparing Two Categorical Variables Describing and Comparing Data with Dotplots and Stemplots Describing and Comparing Data with Histograms Uniform Density Curves
S-ID.3.	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	Measures of Center and Location
S-ID.4.	Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets and tables to estimate areas under the normal curve.	Calculating Probabilities for Sampling Distribution Estimating a Difference in Two Population Means Estimating a Population Mean Estimating a Population Proportion Estimating the Difference between Two Population Proportions Finding Areas within a Normal Distribution Measures of Center and Location Normal Distributions Sampling Distribution of the Sample Mean Sampling Distribution of the Sample Proportion Significance Tests and Confidence Intervals Uniform Density Curves Using the Central Limit Theorem
	Summarize, represent, and interpret data on two categorical and quantitative variables	
S-ID.5.	Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal and conditional relative frequencies). Recognize possible associations and trends in the data.	Categorical Data Displays Describing and Comparing Data with Histograms Relative Frequencies

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S-ID.6.	Represent data on two quantitative variables on a scatter plot and describe how the variables are related.	
S-ID.6(a)	Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.	Calculating the Least-Squares Regression Line Choosing the Best Model Making Predictions from a Least-Squares Regression Line Residuals R-squared and s Transforming to Achieve Linearity
S-ID.6(b)	Informally assess the fit of a model function by plotting and analyzing residuals.	Calculating the Least-Squares Regression Line Choosing the Best Model Correlation Making Predictions from a Least-Squares Regression Line Residuals R-squared and s Transforming to Achieve Linearity
S-ID.6(c)	Fit a linear function for scatter plots that suggest a linear association.	Calculating the Least-Squares Regression Line Choosing the Best Model Correlation Making Predictions from a Least-Squares Regression Line Residuals R-squared and s The Relationship between Two Quantitative Variables Transforming to Achieve Linearity
	Interpret linear models	

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S-ID.7.	Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data.	Calculating the Least-Squares Regression Line Making Predictions from a Least-Squares Regression Line Residuals R-squared and s Transforming to Achieve Linearity
S-ID.8.	Compute (using technology) and interpret the correlation coefficient of a linear fit.	Calculating the Least-Squares Regression Line Choosing the Best Model Making Predictions from a Least-Squares Regression Line Residuals R-squared and s Transforming to Achieve Linearity
S-ID.9.	Distinguish between correlation and causation.	Correlation
S-IC.	Making Inferences and Justifying Conclusions	
	Understand and evaluate random processes underlying statistical experiments	
S-IC.1.	Understand that statistics is a process for making inferences about population parameters based on a random sample from that population.	Considerations When Sampling Introduction to Statistics Other Sampling Methods Simple Random Sample
S-IC.2.	Decide if a specified model is consistent with results from a given data-generating process, e.g. using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?	Introduction to Probability Simulations
	Make inferences and justify conclusions from sample surveys, experiments and observational studies	

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S-IC.3.	Recognize the purposes of and differences among sample surveys, experiments and observational studies; explain how randomization relates to each.	Additional Principles of Experimental Design How to Experiment Well Observational Studies and Experiments Scope of Inference
S-IC.4.	Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.	Choosing the Appropriate Inference Procedure Estimating a Difference in Two Population Means Estimating a Population Mean Estimating the Mean Difference Introduction to Sampling Distributions Introduction to Sampling Methods Measures of Center and Location Preparing to Estimate a Population Mean Preparing to Test a Claim about a Mean Preparing to Test a Claim about a Population Proportion Sampling Distributions – Center and Variability Scope of Inference Significance Tests and Confidence Intervals Testing a Claim about a Difference between Means Testing a Claim about a Difference between Proportions Testing a Claim about a Mean Difference Testing a Claim about a Population Mean Testing a Claim about a Population Proportion

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S-IC.5.	Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.	Additional Principles of Experimental Design Experimental Designs How to Experiment Well Introduction to Probability Observational Studies and Experiments Probability Rules Sampling Distribution of the Sample Proportion Scope of Inference Simulations

Standard ID	Standard Text	Edgenuity Lesson Name
S-IC.6.	Evaluate reports based on data.	Choosing the Appropriate Inference Procedure Estimating a Difference in Two Population Means Estimating a Population Mean Estimating a Population Proportion Estimating the Difference between Two Population Proportions Estimating the Mean Difference Introduction to Confidence Intervals More about Confidence Intervals Preparing to Estimate a Population Mean Preparing to Estimate a Population Proportion Preparing to Test a Claim about a Mean Preparing to Test a Claim about a Population Proportion Sampling Distributions – Center and Variability Significance Tests and Confidence Intervals Testing a Claim about a Difference between Means Testing a Claim about a Difference between Proportions Testing a Claim about a Mean Difference Testing a Claim about a Population Mean Testing a Claim about a Population Proportion
S-CP.	Conditional Probability and the Rules of Probability	
	Understand independence and conditional probability and use them to interpret data	
S-CP.1.	Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (''or,'' ''and,'' ''not'').	Conditional Probabilities Introduction to Random Variables Probability Rules

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S-CP.2.	Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.	Conditional Probabilities The Multiplication Rule for Dependent Events The Multiplication Rule for Independent Events
S-CP.3.	Understand the conditional probability of A given B as P(A and B)/P(B), and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.	Conditional Probabilities The Multiplication Rule for Dependent Events The Multiplication Rule for Independent Events
S-CP.4.	Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.	Binomial Probabilities Categorical Data Displays Relative Frequencies
S-CP.5.	Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.	Conditional Probabilities The Multiplication Rule for Dependent Events The Multiplication Rule for Independent Events
	Use the rules of probability to compute probabilities of compound events in a uniform probability model	
S-CP.6.	Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A and interpret the answer in terms of the model.	Conditional Probabilities The Multiplication Rule for Dependent Events The Multiplication Rule for Independent Events
S-CP.7.	Apply the Addition Rule, P(A or B) = P(A) + P(B) - P(A and B), and interpret the answer in terms of the model.	Applying Probability Rules The Multiplication Rule for Independent Events

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S-CP.8.	(+) Apply the general Multiplication Rule in a uniform probability model, P(A and B) = P(A)P(B|A) = P(B)P(A|B), and interpret the answer in terms of the model.	Applying Probability Rules Probability Rules The Multiplication Rule for Dependent Events The Multiplication Rule for Independent Events
S-CP.9.	(+) Use permutations and combinations to compute probabilities of compound events and solve problems.	Combining Two Random Variables Discrete Random Variables – Mean Probability Rules The Multiplication Rule for Independent Events
S-MD.	Using Probability to Make Decisions	
	Calculate expected values and use them to solve problems	
S-MD.1.	(+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.	Binomial Random Variables Combining Two Random Variables Discrete Random Variables – Mean Finding Values from Probabilities Geometric Random Variables Introduction to Hypothesis Testing Introduction to Random Variables Type I and Type II Errors
S-MD.2.	(+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.	Combining Two Random Variables Discrete Random Variables – Mean Finding Values from Probabilities Geometric Random Variables Introduction to Hypothesis Testing Introduction to Random Variables Type I and Type II Errors

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S-MD.3.	(+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of multiple-choice test where each question has four choices, and find the expected grade under various grading schemes.	Combining Two Random Variables Discrete Random Variables – Mean Finding Values from Probabilities Geometric Random Variables Introduction to Hypothesis Testing Introduction to Random Variables Simulations Type I and Type II Errors
S-MD.4.	(+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. For example, find a current data distribution on the number of TV sets per household in the United States and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households?	Combining Two Random Variables Discrete Random Variables – Mean Finding Values from Probabilities Geometric Random Variables Introduction to Hypothesis Testing Introduction to Random Variables Simulations Type I and Type II Errors
	Use probability to evaluate outcomes of decisions	
S-MD.5.	(+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.	
S-MD.5(a)	Find the expected payoff for a game of chance. (For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant.)	Introduction to Probability
S-MD.7.	(+) Analyze decisions and strategies using probability concepts (e.g. product testing, medical testing, pulling a hockey goalie at the end of a game).	Type I and Type II Errors Using the Central Limit Theorem