

MATH CURRICULUM SUMMARY ~ GRADES 6-8

*DASD STANDARDS Certified are D2, D4, D6
Assessment tasks are Sock Problem, Academy Awards, Project*

Unit 1: Exploring Data

- Displaying Distributions with Graphs
- Describing Distributions with Numbers

Unit 2: The Normal Distribution

- Density Curves and the Normal Distribution
- Standard Normal Calculations

Unit 3: Examining Relationships

- Scatterplots
- Correlation
- Least-Squares Regression

Unit 4: More on Two-Variable Data

- Modeling Nonlinear Relationships
- Interpreting Correlation and Regression
- Relations in Categorical Data

Unit 5: Producing Data

- Designing Samples
- Designing Experiments
- Simulating Experiments

Unit 6: Probability

- Randomness
- Probability Models
- More about Probability

Unit 7: Random Variables

- Discrete and Continuous Random Variables
- Means and Variances of Random Variables

Unit 8: The Binomial and Geometric Distribution

- The Binomial Distribution
- The Geometric Distribution

Unit 9: Sampling Distributions

- Sampling Distributions
- Sample Proportions
- Sample Means

Unit 10: Introduction to Inference

- Estimating with Confidence
- Tests of Significance
- Using Significance Test
- Inference as a Decision

Unit 11: Inference for Distributions

- Inference about the Mean of a Population
- Comparing Two Means

Unit 12: Inference for Proportions

- Inference for a Population Proportion
- Comparing Two Proportions

Unit 13: Inference for Tables: Chi-Square Procedures

- Test for Goodness of Fit
- Inference for Two-Way Tables

Unit 14: Inference for Regression

- Inference about the Model
- Inference about the Prediction
- Checking the Regression Assumptions

Unit 15: Analysis of Variance

- Inference for Population Spread
- One-Way Analysis of Variance