

CED to Math Medic AP Statistics Alignment

CED Unit	Math Medic Unit
CED Unit 1: Exploring One-Variable Data and Collecting Data	Unit 1: Analyzing Data Unit 2: Collecting Data
CED Unit 2: Probability, Random Variables, and Probability Distributions	Unit 3: Probability Unit 4: Random Variables
CED Unit 3: Inference for Categorical Data: Proportions	Unit 5: Sampling Distributions Unit 6: Confidence Intervals for Proportions Unit 7: Hypothesis Tests for Proportions
CED Unit 4: Inference for Quantitative Data: Means	Unit 5: Sampling Distributions Unit 8 Confidence Intervals for Means Unit 9: Hypothesis Tests for Means
CED Unit 5: Regression Analysis	Unit 10: Two-Variable Data

CED Unit 1: Exploring One-Variable Data and Collecting Data

CED Topic 1.1: Introducing Statistics: What Can We Learn From Data?

- Lesson 1.0: Can Joy Smell Parkinson's?
- Lesson 1.1: Statistical Studies

CED Topic 1.2: Variables

- Lesson 1.2: How Are Your Favorite Classes Related?

CED Topic 1.3: Tabular Representation and Summary Statistics for One Categorical Variable

- Lesson 1.2: How Are Your Favorite Classes Related?

CED Topic 1.4: Graphical Representations for One Categorical Variable

- Lesson 1.2: How Are Your Favorite Classes Related?

CED Topic 1.5: Graphical Representations for One Quantitative Variable

- Lesson 1.4: How Many Pairs of Shoes Do You Own?

CED Topic 1.6: Descriptions for One Quantitative Variable Distributions

- Lesson 1.4: How Many Pairs of Shoes Do You Own?

CED Topic 1.7: Summary Statistics for a Quantitative Variable

- Lesson 1.4: How Many Pairs of Shoes Do You Own?
- Lesson 1.5: Which City Has the Better Weather?
- Lesson 1.6: Where Do I Stand?
- Lesson 1.7: How Did Marty Do on His Test?
- Lesson 1.8: Can You Curve the Quiz Scores?

CED Topic 1.8: Graphical Representations of Summary Statistics for One Quantitative Variable

- Lesson 1.6: Where Do I Stand?
- Lesson 4.3: Three Activities

CED Topic 1.9: Comparisons of the Distributions for One Quantitative Variable

- Lesson 1.4: How Many Pairs of Shoes Do You Own?
- Lesson 1.5: Which City Has the Better Weather?
- Lesson 1.6: Where Do I Stand?

CED Topic 1.10: The Investigative Question Revisited and Data Collection

- Lesson 1.1: Statistical Studies
- Lesson 2.1: Does Beyonce Write Her Own Lyrics?
- Lesson 9.7: The Investigative Question

CED Topic 1.11: Random Sampling

- Lesson 2.1: Does Beyonce Write Her Own Lyrics?
- Lesson 2.2: How Much Do Fans Love Taylor Swift? Day 1
- Lesson 2.3: How Much Do Fans Love Taylor Swift? Day 2

CED Topic 1.12: Potential Problems with Sampling

- Lesson 2.1: Does Beyonce Write Her Own Lyrics
- Lesson 2.4: What is Wrong with These Surveys?

CED Topic 1.13: Experimental Design

- Lesson 2.5: Does SAT Prep Improve Scores?
- Lesson 2.6: What is Wrong with These Experiments?
- Lesson 2.7: Does the Type of SAT Prep Matter?
- Lesson 2.8: What's in a Name?
- Lesson 2.9: Does SAT Prep Improve Scores? Part 2

CED Unit 2: Probability, Random Variables, and Probability Distributions

CED Topic 2.1: Tabular and Graphical Representations for the Distributions of Two Categorical Variables

- Lesson 1.3: What Will be the EK Mascot?

CED Topic 2.2: Summary Statistics for Two Categorical Variables

- Lesson 1.2: How Are Your Favorite Classes Related?
- Lesson 1.3: What Will be the EK Mascot?

CED Topic 2.3: Estimating Probabilities Using Simulation

- Lesson 3.1: Is Mrs. Gallas a Good Free Throw Shooter?
- Lesson 3.2: Are Digital Spinners Fair?

CED Topic 2.4: Introduction to Probability

- Lesson 3.1: Is Mrs. Gallas a Good Free Throw Shooter?
- Lesson 3.3: Matching Starburst

CED Topic 2.5: Mutually Exclusive Events

- Lesson 3.4: Taco Tongue, Evil Eyebrow Day 1

CED Topic 2.6: Conditional Probability

- Lesson 3.5: Taco Tongue, Evil Eyebrow Day 2

CED Topic 2.7: Independent Events and Unions of Events

- Lesson 3.4: Taco Tongue, Evil Eyebrow Day 1
- Lesson 3.5: Taco Tongue, Evil Eyebrow Day 2
- Lesson 3.6: Matching Starburst Part 2

CED Topic 2.8: Introduction to Random Variables and Probability Distributions

- Lesson 4.1: How Many Children Are in Your Family?

CED Topic 2.9: Parameters of Random Variables

- Lesson 4.1: How Many Children Are in Your Family?
- Lesson 4.2: How Much Do You Get Paid?
- Lesson 4.3: Three Activities
- Lesson 4.5: How Much Will You Make Next Year?

CED Topic 2.10: The Binomial Distribution

- Lesson 4.6: Will the U.S. Win the World Cup?
- Lesson 4.7: Pop Quiz!
- Lesson 4.8: Do You Like Green Skittles?

CED Topic 2.11: The Normal Distribution

- Lesson 4.3: Three Activities
- Lesson 4.4: How Long is Your Favorite Song?

CED Topic 2.12: Sampling Distributions and the Central Limit Theorem

- Lesson 2.7: Inference and Experiments
- Lesson 5.1: AP Stats Exam Scores – Day 1
- Lesson 5.6: How Tall to Be in the NBA? Day 2
- Lesson 9.3: Is One Form of the AP Exam Harder?

CED Unit 3: Inference for Categorical Data: Proportions

CED Topic 3.1: Estimators

- Lesson 5.1: AP Stats Exam Scores – Day 1
- Lesson 5.2: AP Stats Exam Scores – Day 2

CED Topic 3.2: Sampling Distributions for Sample Proportions

- Lesson 5.3: What's the Proportion of Orange Reese's Pieces?

CED Topic 3.3: Constructing a Confidence Interval for a Population Proportion

- Lesson 4.8: Do You Like Green Skittles?
- Lesson 6.3: Which Way Will the Hershey's Kiss Land?
- Lesson 6.4: What Proportion of Earth is Covered by Water?

CED Topic 3.4: Justifying a Claim Based on a Confidence Interval for a Population Proportion

- Lesson 6.1: Guess the Mystery Proportion
- Lesson 6.2: What Does "95% Confident" Mean?

CED Topic 3.5: Setting Up a Test for a Population Proportion

- Lesson 7.1: Is Mrs. Gallas a Good Free Throw Shooter?
- Lesson 7.2: Are You Sure Mrs. Gallas Isn't a Good Free Throw Shooter?

CED Topic 3.6: p -values

- Lesson 7.2: Are You Sure Mrs. Gallas Isn't a Good Free Throw Shooter?

CED Topic 3.7: Carrying Out a Test for a Population Proportion

- Lesson 7.3: Can You Taste the Rainbow?

CED Topic 3.8: Potential Errors when Performing Tests

- Lesson 7.6: Show Rockford Switch to Bottled Water?
- Lesson 7.7: Will Mrs. Gallas Prove Herself?

CED Topic 3.9: Sampling Distributions for Difference Between Sample Proportions

- Lesson 5.4: Do M&M's or Skittles Have More Orange Candies?

CED Topic 3.10: Constructing a Confidence Interval for the Difference Between Two Population Proportions

- Lesson 6.5: Which Grade is More Likely to Go to Prom?

CED Topic 3.11: Justifying a Claim Based on a Confidence Interval for the Difference Between Population Proportions

- Lesson 6.5: Which Grade is More Likely to Go to Prom?

CED Topic 3.12: Setting Up a Test for the Difference Between Two Population Proportions

- Lesson 7.4: Red or Black?

CED Topic 3.13: Carrying Out a Test for the Difference Between Two Population Proportions

- Lesson 7.5: Which Grade is More Likely to Go to Prom? Part 2

CED Topic 3.14: Setting Up a Chi-Square Test for Homogeneity or Independence

- Lesson 7.8: Which grade is More Likely to Go to Prom? Part 3
- Lesson 7.9: Will You Get Accepted to College?
- Lesson 7.10: Are Taco Tongue and Evil Eyebrow Independent?

CED Topic 3.15: Carrying Out a Chi-Square Test for Homogeneity or Independence

- Lesson 7.9: Will You Get Accepted to College?
- Lesson 7.10: Are Taco Tongue and Evil Eyebrow Independent?

CED Unit 4: Inference for Quantitative Data: Means

CED Topic 4.1: Sampling Distributions for Sample Means

- Lesson 5.5: How Tall to Be in the NBA?

CED Topic 4.2: Constructing a Confidence Interval for a Population Mean or a Population Mean Difference

- Lesson 8.1: What's the Barley Yield?
- Lesson 8.2: How Much Does an Oreo Weigh?
- Lesson 8.3: How Much Screen Time?

CED Topic 4.3: Justifying a Claim Based on a Confidence Interval for a Population Mean or Population Mean Difference

- Lesson 8.3: How Much Screen Time?
- Lesson 8.5: Is Climate Change Real?

CED Topic 4.4: Setting Up a Test for a Population Mean or a Population Mean Difference

- Lesson 9.1: How Do AP Exam Scores Compare?
- Lesson 9.2: What is Normal Body Temperature?

CED Topic 4.5: Carrying Out a Test for a Population Mean or a Population Mean Difference

- Lesson 9.1: How Do AP Exam Scores Compare?
- Lesson 9.2: What is Normal Body Temperature?
- Lesson 9.5: Is Climate Change Real? Part 2

CED Topic 4.6: Sampling Distributions for the Difference Between Sample Means

- Lesson 5.7: AP Exam Scores: Which School is Better?

CED Topic 4.7: Constructing a Confidence Interval for the Difference Between Two Population Means

- Lesson 8.4: Which Cookie Has the Most Chips?

CED Topic 4.8: Justifying a Claim Based on a Confidence Interval for the Difference Between Two Population Means

- Lesson 8.4: Which Cookie Has the Most Chips?

CED Topic 4.9: Setting Up a Test for the Difference Between Two Population Means

- Lesson 9.3: Is One Form of the AP Exam Harder?
- Lesson 9.4: Does a Multivitamin Improve Memory?

CED Topic 4.10: Carrying Out a Test for the Difference Between Two Population Means

- Lesson 9.3: Is One Form of the AP Exam Harder?
- Lesson 9.4: Does a Multivitamin Improve Memory?

CED Unit 5: Regression Analysis

CED Topic 5.1: Graphical Representations Between Two Quantitative Variables

- Lesson 10.1: How Many Rubber Bands Does Barbie Need?

CED Topic 5.2: Correlation

- Lesson 10.2: How Safe is Barbie?

CED Topic 5.3: Linear Regression Models

- Lesson 10.3: How Good Are the Predictions for Barbie?

CED Topic 5.4: Residuals

- Lesson 10.3: How Good Are the Predictions for Barbie?
- Lesson 10.4: Show You Buy Monster Stock?

CED Topic 5.5: Least Squares Regression

- Lesson 10.2: How Safe is Barbie?
- Lesson 10.3: How Good Are the Predictions for Barbie?
- Lesson 10.5: What's the Shipping Cost?