

CED to Math Medic AP Statistics Alignment

CED Unit	Stats Medic Unit
CED Unit 1: Exploring One-Variable Data	Unit 1: Analyzing Data Unit 2: Modeling Data
CED Unit 2: Exploring Two-Variable Data	Unit 3: Two-Variable Data
CED Unit 3: Collecting Data	Unit 4: Collecting Data
CED Unit 4: Probability, Random Variables, and Probability Distributions	Unit 5: Probability Unit 6: Random Variables
CED Unit 5: Sampling Distributions	Unit 7: Sampling Distributions
CED Unit 6: Inference for Categorical Data: Proportions	Unit 8: Confidence Intervals for Proportions Unit 9: Significance Tests for Proportions
CED Unit 7: Inference for Quantitative Data: Means	Unit 10: Confidence Intervals for Mean Unit 11: Significance Tests for Mean
CED Unit 8: Inference for Categorical Data: Chi-Square	Unit 12: Chi-Square Tests
CED Unit 9: Inference for Quantitative Data: Slopes	Unit 13: Linear Regression Inference

CED Unit 1: Exploring One-Variable Data

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

- Lesson 1.0: Can Joy Smell Parkinson's?

CED Topic 1.2: The Language of Variation: Variables

- Lesson 1.1: How Are Your Favorite Classes Related?

CED Topic 1.3: Representing a Categorical Variable with Tables

- Lesson 1.1: How Are Your Favorite Classes Related?

CED Topic 1.4: Representing a Categorical Variable with Graphs

- Lesson 1.1: How Are Your Favorite Classes Related?

CED Topic 1.5: Representing a Quantitative Variable with Graphs

- Lesson 1.3: How Many Pairs of Shoes Do You Own?

CED Topic 1.6: Describing the Distribution of a Quantitative Variable

- Lesson 1.3: How Many Pairs of Shoes Do You Own?

CED Topic 1.7: Summary Statistics for a Quantitative Variable

- Lesson 1.3: How Many Pairs of Shoes Do You Own?
- Lesson 1.4: Which City Has the Better Weather?
- Lesson 1.5: Where Do I Stand?
- Lesson 2.1: Where Do I Stand? Part 2

CED Topic 1.8: Graphical Representations of Summary Statistics

- Lesson 1.5: Where Do I Stand?
- Lesson 2.4: Three Activities

CED Topic 1.9: Comparing Distributions of a Quantitative Variable

- Lesson 1.5: Where Do I Stand?

CED Topic 1.10: The Normal Distribution

- Lesson 2.2: How Did Marty Do On His Test?
- Lesson 2.4: Three Activities
- Lesson 2.5: How Long is Your Favorite Song?

CED Unit 2: Exploring Two-Variable Data

CED Topic 2.1: Introducing Statistics: Are Variables Related?

- Lesson 1.2: What Will be the EK Mascot?

CED Topic 2.2: Representing Two Categorical Variables

- Lesson 1.1: How Are Your Favorite Classes Related?
- Lesson 1.2: What Will be the EK Mascot?

CED Topic 2.3: Statistics for Two Categorical Variables

- Lesson 1.1: How Are Your Favorite Classes Related?

CED Topic 2.4: Representing the Relationship Between Two Quantitative Variables

- Lesson 3.1: How Many Rubber Bands Does Barbie Need?

CED Topic 2.5: Correlation

- Lesson 3.2: How Safe is Barbie?

CED Topic 2.6: Linear Regression Models

- Lesson 3.3: How Good Are the Predictions for Barbie?

CED Topic 2.7: Residuals

- Lesson 3.3: How Good Are the Predictions for Barbie?
- Lesson 3.4: Show You Buy Monster Stock?

CED Topic 2.8: Least Squares Regression

- Lesson 3.2: How Safe is Barbie?
- Lesson 3.3: How Good Are the Predictions for Barbie?

CED Topic 2.9: Analyzing Departures from Linearity

- Lesson 3.5: How Do Outliers Affect the LSRL?
- Lesson 3.6: Can You Predict Monster Energy Stock Values?
- Lesson 3.7: How Close Can You Get to the Finish Line?

CED Unit 3: Collecting Data

CED Topic 3.1: Introducing Statistics: Do the Data We Collected Tell the Truth?

- Lesson 4.1: Does Beyonce Write Her Own Lyrics?

CED Topic 3.2: Introduction to Planning a Study

- Lesson 4.1: Does Beyonce Write Her Own Lyrics?
- Lesson 4.5: Does SAT Prep Improve Scores?
- Lesson 4.9: Does SAT Prep Improve Scores? Part 2

CED Topic 3.3: Random Sampling and Data Collection

- Lesson 4.1: Does Beyonce Write Her Own Lyrics?
- Lesson 4.2: How Much Do Fans Love Taylor Swift? Day 1
- Lesson 4.3: How Much Do Fans Love Taylor Swift? Day 2

CED Topic 3.4: Potential Problems with Sampling

- Lesson 4.1: Does Beyonce Write Her Own Lyrics
- Lesson 4.4: What is Wrong with These Surveys?

CED Topic 3.5: Introduction to Experimental Design

- Lesson 4.5: Does SAT Prep Improve Scores?
- Lesson 4.6: What is Wrong with These Experiments?
- Lesson 4.7: Does the Type of SAT Prep Matter?

CED Topic 3.6: Selecting an Experimental Design

- Lesson 4.7: Does the Type of SAT Prep Matter?

CED Topic 3.7: Inference and Experiments

- Lesson 4.8: What's in a Name?
- Lesson 4.9: Does SAT Prep Improve Scores? Part 2

CED Unit 4: Probability, Random Variables, and Probability Distributions

CED Topic 4.1: Introducing Statistics: Random and Non-Random Patterns?

- Lesson 5.1: Is Mrs. Gallas a Good Free Throw Shooter?

CED Topic 4.2: Estimating Probabilities Using Simulation

- Lesson 5.1: Is Mrs. Gallas a Good Free Throw Shooter?
- Lesson 5.2: Are Soda Contests True?

CED Topic 4.3: Introduction to Probability

- Lesson 5.1: Is Mrs. Gallas a Good Free Throw Shooter?
- Lesson 5.3: Matching Starburst

CED Topic 4.4: Mutually Exclusive Events

- Lesson 5.4: Taco Tongue, Evil Eyebrow Day 1

CED Topic 4.5: Conditional Probability

- Lesson 5.5: Taco Tongue, Evil Eyebrow Day 2

CED Topic 4.6: Independent Events and Unions of Events

- Lesson 5.4: Taco Tongue, Evil Eyebrow Day 1
- Lesson 5.5: Taco Tongue, Evil Eyebrow Day 2
- Lesson 5.6: Matching Starburst Part 2

CED Topic 4.7: Introduction to Random Variables and Probability Distributions

- Lesson 6.1: How Many Children Are in Your Family?

CED Topic 4.8: Mean and Standard Deviation of Random Variables

- Lesson 6.1: How Many Children Are in Your Family?

CED Topic 4.9: Combining Random Variables

- Lesson 2.3: Can You Curve the Test Scores?
- Lesson 6.3: Is It Time for a Raise?
- Lesson 6.4: How Much Will You Make Next Year?

CED Topic 4.10: Introduction to Binomial Distribution

- Lesson 6.5: Will the U.S. Win the World Cup?

CED Topic 4.11: Parameters for a Binomial Distribution

- Lesson 6.6: Pop Quiz!

CED Topic 4.12: The Geometric Distribution

- Lesson 6.8: how Many Bottle Flips to Go Viral?

CED Unit 5: Sampling Distributions

CED Topic 5.1: Introducing Statistics: Why Is My Sample Not Like Yours?

- Lesson 7.1: AP Stats Exam Scores – Day 1

CED Topic 5.2: The Normal Distribution, Revisited

- Lesson 6.2: How Much Do You Get Paid?

CED Topic 5.3: The Central Limit Theorem

- Lesson 7.6: How Tall to Be in the NBA? Day 2

CED Topic 5.4: Biased and Unbiased Estimators

- Lesson 7.2: AP Stats Exam Scores – Day 2

CED Topic 5.5: Sampling Distributions for Sample Proportions

- Lesson 7.3: What's the Proportion of Orange Reese's Pieces?

CED Topic 5.6: Sampling Distributions for Differences in Sample Proportions

- Lesson 7.4: Do M&M's or Skittles Have More Orange Candies?

CED Topic 5.7: Sampling Distributions for Sample Means

- Lesson 7.5: How Tall to Be in the NBA?

CED Topic 5.8: Sampling Distributions for Differences in Sample Means

- Lesson 7.7: AP Exam Scores: Which School is Better?

CED Unit 6: Inference for Categorical Data: Proportions

CED Topic 6.1: Introducing Statistics: Why Be Normal?

- Lesson 8.1: Guess the Mystery Proportion

CED Topic 6.2: Constructing a Confidence Interval for a Population Proportion

- Lesson 6.7: Do You Like Green Skittles?
- Lesson 8.3: Which Way Will the Hershey's Kiss Land?
- Lesson 8.4: What Proportion of Earth is Covered by Water?

CED Topic 6.3: Justifying a Claim Based on a Confidence Interval for a Population Proportion

- Lesson 8.1: Guess the Mystery Proportion
- Lesson 8.2: What Does "95% Confident" Mean?

CED Topic 6.4: Setting Up a Test for a Population Proportion

- Lesson 9.1: Is Mrs. Gallas a Good Free Throw Shooter?
- Lesson 9.2: Are You Sure Mrs. Gallas Isn't a Good Free Throw Shooter?

CED Topic 6.5: Interpreting p -values

- Lesson 9.2: Are You Sure Mrs. Gallas Isn't a Good Free Throw Shooter?

CED Topic 6.6: Concluding a Test for a Population Proportion

- Lesson 9.3: Can You Taste the Rainbow?

CED Topic 6.7: Potential Errors when Performing Tests

- Lesson 9.6: Show Rockford Switch to Bottled Water?
- Lesson 9.7: Will Mrs. Gallas Prove Herself?

CED Topic 6.8: Confidence Intervals for the Difference of Two Proportions

- Lesson 8.5: Which Grade is More Likely to Go to Prom?

CED Topic 6.9: Justifying a Claim Based on a Confidence Interval for a Difference of Population Proportions

- Lesson 8.5: Which Grade is More Likely to Go to Prom?

CED Topic 6.10: Setting Up a Test for the Difference of Two Population Proportions

- Lesson 9.4: Red or Black?

CED Topic 6.11: Carrying Out a Test for the Difference of Two Population Proportions

- Lesson 9.5: Which Grade is More Likely to Go to Prom?

CED Unit 7: Inference for Quantitative Data: Means

CED Topic 7.1: Introducing Statistics: Should I Worry About Error?

- Lesson 9.1: Is Mrs. Gallas a Good Free Throw Shooter?

CED Topic 7.2: Constructing a Confidence Interval for a Population Mean

- Lesson 10.1: How Much Does an Oreo Weigh?
- Lesson 10.2: How Much Screen Time?

CED Topic 7.3: Justifying a Claim About a Population Mean Based on a Confidence Interval

- Lesson 10.2: How Much Screen Time?
- Lesson 10.4: Is Climate Change Real?

CED Topic 7.4: Setting Up a Test for a Population Mean

- Lesson 11.1: How Do AP Exam Scores Compare?
- Lesson 11.2: What is Normal Body Temperature?

CED Topic 7.5: Carrying Out a Test for a Population Mean

- Lesson 11.1: How Do AP Exam Scores Compare?
- Lesson 11.2: What is Normal Body Temperature?
- Lesson 11.5: Is Climate Change Real? Part 2

CED Topic 7.6: Confidence Intervals for the Difference of Two Means

- Lesson 10.3: Which Cookie Has the Most Chips?

CED Topic 7.7: Justifying a Claim About the Difference of Two Means Based on a Confidence Interval

- Lesson 10.3: Which Cookie Has the Most Chips?

CED Topic 7.8: Setting Up a Test for the Difference of Two Population Means

- Lesson 11.3: Is One Form of the AP Exam Harder?
- Lesson 11.4: Does a Multivitamin Improve Memory?

CED Topic 7.9: Carrying Out a Test for the Difference of Two Population Means

- Lesson 11.3: Is One Form of the AP Exam Harder?
- Lesson 11.4: Does a Multivitamin Improve Memory?

CED Unit 8: Inference for Categorical Data: Chi-Square

CED Topic 8.1: Introducing Statistics: Are My Results Unexpected

- Lesson 12.1: What Is Your Favorite Color M&M? Part 1

CED Topic 8.2: Setting Up a Chi-Square Goodness of Fit Test

- Lesson 12.1: What Is Your Favorite Color M&M? Part 1

CED Topic 8.3: Carrying Out a Chi-Square Test for Goodness of Fit

- Lesson 12.2: What Is Your Favorite Color M&M? Part 2

CED Topic 8.4: Expected Counts in Two-Way Tables

- Lesson 12.3: Will You Get Accepted to College?

CED Topic 8.5: Setting Up a Chi-Square Test for Homogeneity

- Lesson 12.3: Will You Get Accepted to College?
- Lesson 12.4: Are Taco Tongue and Evil Eyebrow Independent?

CED Topic 8.6: Carrying Out a Chi-Square Test for Homogeneity or Independence

- Lesson 12.3: Will You Get Accepted to College?
- Lesson 12.4: Are Taco Tongue and Evil Eyebrow Independent?

CED Unit 9: Inference for Quantitative Data: Slopes

CED Topic 9.1: Introducing Statistics: Do Those Points Align?

- Lesson 13.1: Do Absences Affect Your Grade? Part 1

CED Topic 9.2: Confidence Intervals for the Slope of a Regression Model

- Lesson 13.1: Do Absences Affect Your Grade? Part 1
- Lesson 13.2: Do Absences Affect Your Grade? Part 2

CED Topic 9.3: Justifying a Claim About the Slope of a Regression Model Based on a Confidence Interval

- Lesson 13.2: Do Absences Affect Your Grade? Part 2

CED Topic 9.4: Setting Up a Test for the Slope of a Regression Model

- Lesson 13.3: Does Studying Improve Test Scores?

CED Topic 9.5: Carrying Out a Test for the Slope of a Regression Model

- Lesson 13.3: Does Studying Improve Test Scores?