Community Charter School of Cambridge Logo

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Teacher(s): |  |  | Subject/Course: Algebra 1 | |  |  |
|  | Unit Number and Title: Unit 4, Descriptive Statistics & MCAS Prep |  |  | Estimated Dates and Length: 3/24 – 5/9 (6 weeks) | |  |  |
|  | Essential Questions: |  |  | Main Topic(s): | |  |  |
|  | EQ1: What are the different methods of data representation and |  |  |  Measures of Central Tendency | |  |  |
|  |  |  |  Tables, Lists, Line Plots, Box Plots, Circle Graphs, Bar graphs, | |  |  |
|  | what kinds of data do we use to create them? |  |  |  |  |
|  |  |  |  | Histograms, |  |  |
|  |  |  |  |  |  |  |
|  | EQ2: What are the advantages and disadvantages of each |  |  |  Scatter plots & Lines of Best Fit | |  |  |
|  |  |  |  Linear Regression & Residuals | |  |  |
|  | method of data representation? |  |  |  |  |
|  |  |  |  | Interpolation & Extrapolation |  |  |
|  |  |  |  |  |  |
|  | EQ3: How can we use summary statistics and data |  |  |  | Correlation Coefficients |  |  |
|  | representations to describe a distribution or support/refute a |  |  |  2D & 3D geometry: area, perimeter, volume, surface area | |  |  |
|  | claim? |  |  |  Parallel Lines, Angles, Transversals, Right Triangle Theorems | |  |  |
|  |  |  |  |  | Geometric Transformations |  |  |
|  |  |  |  |  Slopes, Distance Formula, Midpoints | |  |  |
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|  | Standards | | | | | | | | | | | | | | | | |  | |  | Objectives | | | | | | |  | | | | | | | |  |  |  |  | |  | Standards | |  | |  |
|  | (number and words) | | | | | | | | | | | | | | | | |  | |  | ( | **Highlight** | | | those related to power standards and | | | | | | | | | | | | | | | |  | (number and words) | |  | |  |
|  | **Highlight** | | power standards | | | | | | | | | | | | | | |  | |  | provide | | | | | | |  | | | | | | | |  |  |  |  | |  | **Highlight** | power |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  |  |  | | |  |  | |  | | | | | | | |  |  |  |  | |  | standards | |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | Students will be able to determine the best data | | | | | | | | | | | | | | | | | |  | |  | Mini Quiz 4.1 | |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  |  | | | | |  | | | | | | | | | | |  |  | | |  | Mini Quiz 4.2 | |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | representation to use for a given situation. (1, 7) | | | | | | | | | | | | | | |  |  |  | | |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  |  |  | | |  |  | |  | | | | | | | |  |  |  |  | |  | Mini Quiz 4.3 | |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | Students will be able to identify and explain key | | | | | | | | | | | | | | | |  |  | | |  | Test 4.1 | |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  |  | | | | |  | | | | | | | | | | | | | | |  | Mini Quiz 4.4 | |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | features of each plot (dot pots, histograms, and | | | | | | | | | | | | | | | | |  | | |  |  | |  |
|  | S.ID.1 Represent data with plots on the real | | | | | | | |  |  | | | | | | | |  | |  |  |  |
|  |  |  | | | | | | | |  | |  |  |  | | |  |  | |  | | | | | | | |  |  |  |  | |  | Final Exam | |  | |  |
|  |  |  | | | | | | | |  | |  | box plots) | | | | | .(1, 3, 4, 5) | |  | | | | | | | |  |  |  |  | |  |  | |  |
|  | number line (dot plots, histograms, and box | | | | | | | | |  | | | | | | | |  | |  |  | | | | | | | |  |  |  |  | |  |  | |  |
|  |  | | | | | | | |  | |  |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
|  |  | | | | | | | |  | |  |  |  | | |  |  | |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
|  | plots). |  | | | | | | | | | | | | | | | |  | |  | Students will be able to create dot plots, | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | histograms, and box plots given data. (1, 4, 5, 6) | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | Students will be able to analyze data given in | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | different forms. (1, 2, 7) | | | | | | |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | Students will be able to interpret measures of | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | center and spread (variability) to compare | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | several data sets. (1, 2, 3) | | | | | | |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | Students will be able to identify shapes of | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  | S.ID.2 Use statistics appropriate to the shape of | | | | | | | | | | | | | | | | |  | |  | distributions (skewed left or right, bell, uniform, | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  | the data distribution to compare center | | | | | | | | | | | | | | | | |  | |  | symmetric). (1, 7) | | | | | | |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
|  | (median, mean) and spread (interquartile | | | | | | | | | | | | | | | | |  | |  |  |  | | |  |  | |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
|  | range, standard deviation) of two or more | | | | | | | | | | | | | | | | |  | |  | Students will be able to recognize | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  | different data sets. | | | | | | | | | | | | | | | | |  | |  | appropriateness of mean/standard deviation for | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | symmetric data. (1, 7) | | | | | | |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | Students will be able to recognize | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | appropriateness of 5 number summary for | | | | | | | | | | | | | | | | | | | |  |  |  |  | |  |
|  |  |  |  | | | | | |  |  | | | | | | | |  | |  | skewed data. (1, 7) | | | | | | |  | | | | | | | |  |  |  |  | |  |  |  |  | |  |
| Community Charter School of Cambridge Logo |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | Students will be able to recognize gaps, clusters, | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | and trends in the data set. (1, 7) | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  | S.ID.3 Interpret differences in shape, center, and | | | | | | | | | | | | | | | | | |  |  | Students will be able to recognize outliers and | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  |  |  | their impact on the center. (1, 7) | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  | spread in the context of the data sets, | | | | | | | | | | | | | | | | | |  |  |  | | |  | |  |
|  |  |  |  | | |  | | |  | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  | accounting for possible effects of extreme data | | | | | | | | | | | | | | | | | |  |  | Students will be able to effectively communicate | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  | points (outliers). | | | | | | | | | | | | | | | | | |  |  |  | | |  | |  |
|  |  |  | what the data reveals. (3, 4) | | | | | | | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | Students will know that in order to compare | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | distributions there must be common scales and | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | units. (5, 6) | | | | | | | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | Students will be able to recognize types of | | | | | | | | | | | |  |  |  | | | | | |  | | |  | |  |
|  | S.ID.6 Represent data on two quantitative | | | | | | |  | |  |  |  | |  |  | |  | |  |  |  | | |  | | |  | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | |  |  |  | |  |  | |  | |  |  | relationships that lend themselves to linear and | | | | | | | | | | | | | |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  |  | | | | | |  | | |  | |  |
|  | variables on a scatter plot, and describe how | | | | | | | | | | |  | |  |  | |  | |  |  |  | | |  | | |  | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | |  |  | |  | |  |  | exponential models. | | | | | | (6, 7) | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  | the variables are related. | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  |  | | |  | | |  | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | Students will be able to create and use | | | | | | | | |  | | | |  | | | | | | |  | | |  | |  |
|  | a. Fit a function to the data; use functions fitted | | | | | | | | | | | | | | | |  | |  |  |  | | |  | | |  | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | |  |  | regression models to represent a contextual | | | | | | | | | | | | |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  |  | | | | | | |  | | |  | |  |
|  | to data to solve problems in the context of the | | | | | | | | | | | | |  |  | |  | |  |  |  | | |  | | |  | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  |  | |  | |  |  | situation. | | | (1, 7) | | | | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  | data. Use given functions or choose a function | | | | | | | | | | | | | |  | |  | |  |  |  | | |  | | |  | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | | | |  |  | | |  | | | | | | | | |  |  | Students will be able to create a graphic display | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  | suggested by the context. Emphasize linear, | | | | | | | | | |  | | | | | | | |  |  |  | | |  | |  |
|  |  | | | | |  | | | |  | | | | | | | | |  |  | of residuals. (4, 5, 6) | | | | | | | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  | quadratic, and exponential models. | | | | | |  | | |  | | | | | | | | |  |  |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  | b. Informally assess the fit of a function by | | | | | | | | | | | | | | | | | |  |  | Students will be able to recognize patterns in | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  | plotting and analyzing residuals. | | | | | | | | | | | | | | | | | |  |  | residual plots. (7) | | | | | | | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | | | |  | | | | | | | | | | | | |  |  | Students will be able to calculate residuals with a | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
|  | c. Fit a linear function for a scatter plot that | | | | | | | | |  | | | | | | | | |  |  |  | | |  | |  |
|  | suggests a linear association. | | | | |  | | | | | | | | | | | | |  |  | calculator. (1, 5, 6) | | | | | | | |  |  | | |  |  |  | | | | | |  | | |  | |  |
|  |  | | |  | |  |  |  | |  |  |  | |  |  | |  | |  |  | | | | | | | | | | | | | | | | | | | | |  | | |  | |  |
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|  |  | | | |  | | | | | | | |  | | |  | | | |  |  | |  | | | | | | | | | | | | | |  | | |  |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | relationships displayed in a scatter plot. | | | | | | | | | | (1, 7) | | | | | |  | | |  |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | Students will be able to determine an equation | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | for the line of best fit for a set of data points. (1, 2, | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | 6, 7) | |  | | | | | | | |  |  | | | | |  | | |  |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  |  | |  | | | | | | | |  |  | | | | |  | | |  |  | | |  |
|  | S.ID.7 Interpret the slope (rate of change) and | | | | | | | | | | | |  | | |  | | | |  |  | |  | | | | | | | |  |  | | | | |  | | |  |  | | |  |
|  |  | | |  | | | |  | Students will be able to interpret the slope and y- | | | | | | | | | | | | | | | | | | |  |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  |  |  | | |  |
|  | the intercept (constant term) of a linear model | | | | | | | | | | | | | | |  | | | |  |  |
|  |  | | | |  | intercept of a linear model in the context of the | | | | | | | | | | | | | | | |  | | |  |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  |  | | | |  | | |  |
|  | in the context of the data. | | | |  | | | | | | | |  | | |  | | | |  |  |
|  |  | | | | | | | |  | | |  | | | |  | data. | | (2, 7) | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  |  | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | Students will know the range of the values ( | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | 1  *r* 1 ) and the interpretation of those values | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | for correlation coefficients. (1, 2, 3) | | | | | | | | | | | | | | | | | | | |  | | |  |
|  | S.ID.8 Compute (using technology) and interpret | | | | | | | | | | | | | | | | | | |  |  | |  | | | | | | | |  |  | | | | |  | | |  |  | | |  |
|  | the correlation coefficient of a linear fit. | | | | | | | | | | | | | | | | | | |  | Students will be able to compute and analyze | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | the correlation coefficients for the purpose of | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | communicating the goodness of fit of a linear | | | | | | | | | | | | | | | | | | | |  | | |  |
|  |  | | | |  | | | | | | | |  | | |  | | | |  | model for a given data set. (1, 2, 3, 4, 5, 6) | | | | | | | | | | | | | | | | | | | |  | | |  |

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| --- | --- |
| Vocabulary | Mean, median, mode, frequency, range, stem leaf, minimum, maximum, upper quartile, lower quartile, |
|  | interquartile range, skewed, symmetric, bell, uniform, five number summary, central angle, scatterplot, |
|  | correlation, line of fit, standard deviation, correlation coefficient, variability, gaps, clusters, outliers, spread, |
|  | extreme data points, regression, residuals, parallel lines, transversal, corresponding angles, alternate interior |
|  | angles, alternate exterior angles, vertical angles, similar, congruent, interpolation, extrapolation, transformation, |
|  | dilation, reflection, rotation, translation, leg, hypotenuse |
|  |  |
| Resources, | [http://www.teacherspayteachers.com](http://www.teacherspayteachers.com/)/ |
| including texts | [https://commoncorealgebra1.wikispaces.hcpss.org/Unit+](https://commoncorealgebra1.wikispaces.hcpss.org/Unit+4)4 |
| and other | [http://www.illustrativemathematics.org/standards/h](http://www.illustrativemathematics.org/standards/hs)s |
| materials | [http://coreessentials.wordpress.com/2013/05/26/algebra-1-common-core-resources-draft](http://coreessentials.wordpress.com/2013/05/26/algebra-1-common-core-resources-draft/)/ |
|  | [http://www.mathwords.com](http://www.mathwords.com/)/ |
|  | Glencoe Algebra 1 2012 |
|  | On Core Mathematics Algebra 1 2010 |
|  | Triumph Learning Common Core Coach Algebra 1 2014 |
|  | Algebra Fun Sheets |
|  | MCAS Item Search |
|  | Maryland Common Core State Curriculum Frameworks |
|  | [http://www.parcconline.org/samples/item-task-prototype](http://www.parcconline.org/samples/item-task-prototypes)s |

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|  |  |  |  |  | Block 1 |  |  | Block 2 |  |  |  | Block 3 | | | | | |  |  |  | Block 4 | | | | | |  |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Measures of Central Tendency: Tables and | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Lists, and Line Plots aka Dot Plots, and stem | |  | Measures of Central Tendencies: | |  | Measures of Central Tendencies: Bar Graphs | | | | | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | and leaf plots |  |  | Box Plots and Circle Graphs |  |  |  | and Histogram | | | | | |  |  |  | IA3 Prep | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  We will be able to analyze a set of | |  |  | We will be able to analyze a set of |  |  We will be able to analyze a set of | | | | | | | |  |  | We will be able to demonstrate that | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Week 27: 3/24-3/28 |  |  |  | data given in a table, a list, a stem and |  |  | data given in a box plot or a circle |  |  | data given in a bar graph or | | | | | | |  |  | we have met our unit 3 learning | | | | | | |  |
|  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | leaf plot, and from a line plot (aka a |  |  | graph (1, 2, 6). |  |  | histogram (1, 2, 6). | | | | | | |  |  | outcomes. | | | | | | |  |
|  |  |  |  |  | dot plot) (1, 2, 6). |  |  |  |  We will be able to represent given | | | | | | | |  |  |  |
|  |  |  |  |  |  | We will be able to represent given |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  We will be able to represent given | |  |  | data in a box plot or a circle |  |  | data in a bar graph or histogram(1, 4, | | | | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | data in a line plot or in a stem and leaf |  |  | graph (1, 4, 6). |  |  | 6). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | plot (1, 4, 6). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ASSESSMENTS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Mini Quiz 4.1 | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | Scatterplots + Lines of Best Fit | | | | | | |  | Interpret Slope and Y-Intercept of linear | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | models | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | We will be able to recognize types of | | | | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | We will be able to recognize types of | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | relationships that lend themselves to | | | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | relationships that lend themselves to | | | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  | linear and exponential models. | | (6, 7) | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | IA3 |  |  |  |  | linear and exponential models. | | (6, 7) | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | IA3 Prep |  |  |  | We will be able to recognize a linear | | | | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | We will be able to recognize a linear | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Week 28: 3/31-4/4 |  |  |  |  |  |  |  |  | relationships displayed in a scatter | | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | relationships displayed in a scatter | | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | |  |
|  |  |  | We will be able to demonstrate that |  |  |  |  |  | plot. | (1, 7) | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  We will be able to demonstrate | |  |  |  |  | plot. | (1, 7) | | | | | |  |
|  | IA3 |  |  |  | we have met our unit 3 learning |  |  | We will be able to determine an | | | | | | |  |  |  |
|  |  |  |  |  |  |  | We will be able to determine an | | | | | | |  |
|  |  |  | |  |  |  |  |  |  |  |
|  |  |  |  |  | outcomes. |  |  | that we have met our unit 3 |  |  | equation for the line of best fit for a | | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | learning outcomes. |  |  |  |  | equation for the line of best fit for a | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  | set of data points. (1, 2, 6, 7) | | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | set of data points. (1, 2, 6, 7) | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  Students will be able to interpret the | | | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Students will be able to interpret the | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  | slope and y-intercept of a linear | | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | slope and y-intercept of a linear | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  | model in the context of the data. (2, | | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | model in the context of the data. (2, | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  | 7) |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | ASSESSMENTS |  |  |  |  |  |  | IA3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Community Charter School of Cambridge Logo |  |  |  |  | Block 1 | | | |  |  |  | Block 2 | | | |  |  | Block 3 | | | |  |  | Block 4 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Linear Regression and Residuals | | | |  |  | Interpolation and Extrapolation | | | | |  |  | Correlation Coefficients | | | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | We will be able to create and use | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | We will be able to create and use | | |  |  |  | We will be able to create and use | | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | regression models to represent a | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | regression models to represent a | |  |  |  |  |  |  | regression models to represent a | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | contextual situation. | (1, 7) | | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | contextual situation. | (1, 7) | | |  |  |  |  | contextual situation. | (1, 7) | | |  |  |  |  |
|  |  |  |  |  |  |  | We will be able to create a | | | |  |  |  |  |  |  |
|  |  |  |  |  | We will be able to create a graphic | | | |  |  |  |  We will be able to create a graphic | | | | |  |  |  |  |
|  |  |  |  |  |  |  | graphic display of residuals. (4, 5, | | | |  |  |  |  |  |
|  |  |  |  |  | display of residuals. (4, 5, 6) | | | |  |  |  |  |  | display of residuals. (4, 5, 6) | | | |  |  | Review and Reteach |  |
|  | Week 29: 4/7-4/11 |  |  |  |  |  | 6) | |  |  |  |  |  |  |  |  |
|  |  |  |  | We will be able to recognize patterns | | | |  |  |  |  |  |  |  We will be able to recognize patterns | | | | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | We will be able to recognize | | | |  |  |  | TBD |  |
|  |  |  |  |  | in residual plots. (7) | | | |  |  |  |  | in residual plots. (7) | | | |  |  |  |
|  |  |  |  |  |  |  |  | patterns in residual plots. (7) | | | |  |  |  |  |  |  |
|  |  |  |  |  | We will be able to calculate residuals | | | |  |  |  |  |  We will be able to calculate residuals | | | | |  |  |  |  |
|  |  |  |  |  |  |  | We will be able to calculate | | | |  |  |  |  |  |
|  |  |  |  |  | with a calculator. (1, 5, 6) | | | |  |  |  |  | with a calculator. (1, 5, 6) | | | |  |  |  |  |
|  |  |  |  |  |  |  |  | residuals with a calculator. (1, 5, 6) | | | |  |  |  |  |  |  |
|  |  |  |  |  | We will be able to use a line of best fit | | | |  |  |  |  |  We will be able to use a line of best fit | | | | |  |  |  |  |
|  |  |  |  |  |  |  | We will be able to use a line of | | | |  |  |  |  |  |
|  |  |  |  |  | to determine other possible data | | | |  |  |  |  | to determine other possible data | | | |  |  |  |  |
|  |  |  |  |  |  |  |  | best fit to determine other possible | | | |  |  |  |  |  |  |
|  |  |  |  |  | points (1, 2, 4, 7) | | | |  |  |  |  |  | points (1, 2, 4, 7) | | | |  |  |  |  |
|  |  |  |  |  |  |  |  | data points (1, 2, 4, 7) | | | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | ASSESSMENTS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Mini Quiz 4.2 |  |
|  |  |  |  |  |  |  |  |  |  |  | | | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Area and Perimeter: Basics | | | |  | Area and Perimeter: Composite Figures | | | | | |  |  |  |  |  |  |  |  | Volume |  |
|  |  |  |  |  |  |  |  | and Inscribed Figures | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  We will be able to calculate the volume | |  |
|  |  |  |  |  | We will be able to calculate the area and | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Surface Area and Lateral Surface Area | | | | |  |  | of rectangular prisms, square pyramids, |  |
|  |  |  |  |  |  |  |  |  |  |  |  | We will be able to calculate the area | | | |  |  |  |  |
|  |  |  |  |  | perimeter of 2D figures (1, 6). | | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | cylinders, cones, and spheres (1. 6). |  |
|  |  |  |  |  | We will be able to determine the missing | | | |  |  |  | and perimeter of composite figures (1, | | | |  |  We will be able to calculate the surface | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Week 30: 4/14-4/18 |  |  |  |  | 6, 7). | |  |  |  |  |  |  | We will be able to calculate the volume |  |
|  |  |  |  | side of a 2D figure when given the | | | |  |  |  |  |  |  |  | area and lateral surface area of | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | of solids when given the surface area and |  |
|  |  |  |  |  | perimeter or area of the figure (1, 6, 7). | | | |  |  |  |  |  |  |  |  |  | rectangular right prisms, cones, cylinders, | | | |  |  |  |
|  |  |  |  |  |  |  |  | We will be able to calculate the area | | | |  |  |  |  | some dimensions (1, 2, 6, 7). |  |
|  |  |  |  | We will be able to determine the radius of | | | |  |  |  |  | square right pyramids and spheres (1, 6). | | | |  |  |  |
|  |  |  |  |  |  |  | of the shaded regions when one | | | |  |  |  |  | We will be able to determining missing |  |
|  |  |  |  |  | a circle when given the circumference or | | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | figure is drawn inside of another (1, 6, | | | |  |  |  |  |  |  |  |  | dimensions when given the volume and |  |
|  |  |  |  |  | area of the circle (1, 6). | | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 7). | |  |  |  |  |  |  |  |  |  |  |  | some dimensions of solids (1, 2, 6, 7). |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ASSESSMENTS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Mini Quiz 4.3 |  |
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Community Charter School of Cambridge Logo

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|  |  |  |  | Block 1 |  |  |  | Block 2 |  |  | Block 3 |  | Block 4 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | Interior/Exterior Angles;Vertical Angles; | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | Comp/Supp Angles; Parallel Lines + | |  |  |  |  |
|  |  |  |  |  |  |  |  | Test 4.1 |  |  | Transversals |  | Pythagorean Theorem and 45-45-90 Triangle | |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Theorem and 30-60-90 Triangle Theorem | |  |
|  |  |  |  | Review and Reteach | |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  We will be able to demonstrate | |  |  We will be able to determine the | |  |  |  |  |
|  | Week 31: 4/28-5/2 |  |  |  |  |  |  |  |  We will be able to apply triangle | |  |
|  |  |  |  |  |  |  |  |  |  | measure of angles by applying our |  |  |
|  |  |  |  |  TBD | |  |  | that we have met our unit 4 |  |  |  |  |
|  |  |  |  |  |  |  |  | knowledge of complementary and |  | theorems in order to solve problems (1, 6, | |  |
|  |  |  |  |  |  |  |  | learning outcomes so far. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | supplementary angles, vertical angles, | 7). | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | and parallel lines cut by a transversal (1, |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 6, 7). |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ASSESSMENTS |  |  |  |  |  |  | Test 4.1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Geometric |  |  |  |  |  |  |  |
|  |  |  |  | Slopes, Distances, and Midpoints | |  |  | Transformations |  |  | Congruent and Similar Figures |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  We will be able to calculate midpoints of | |  |  | We will be able to draw the results of |  |  | We will be able to apply what we know |  | Review and Reteach | |  |
|  |  |  |  | segments and the distance between two | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Week 32: 5/5-5/9 |  |  |  |  | transformations (translations, |  |  | about congruent and similar figures to |  |  |  |  |
|  |  |  | points on a coordinate plane (1, 6, 7). | |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | reflections, and rotations) on figures in |  |  | find missing parts (2, 6, 7). |  |  TBD | |  |
|  |  |  |  |  We will be able to calculate slope of lines | |  |  |  |  |  |  |
|  |  |  |  |  |  | the coordinate plane (1, 4, 6). |  |  |  |  |  |  |  |
|  |  |  |  | and segments on a coordinate plane (1, 6, | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | We will be able to write rules to |  |  |  |  |  |  |  |
|  |  |  | 7). | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | describe transformations on figures in |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | the coordinate plane (1, 6, 7). |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | ASSESSMENTS |  |  |  |  |  |  |  |  |  |  |  | Mini Quiz 4.4 | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |