THE GREEN TEAM Activities and Lesson Plans Alignment with the Massachusetts Curriculum Framework for Mathematics, June 2017

Grade	Strand	Learning Standard	Slash Trash	Waste Free Day	Set up School Recycling Program	Rummage Sale/Drive Collecting Recyclables	Climate Change Scorecard	Create Signs and Posters	Composting
PreK	**Counting and Cardinality**	**PK.CC.1.** Listen to and say the names of numbers in meaningful contexts.	X	X		X			X
		PK.CC.2. Recognize and name written numerals 0–10.	X	X		X			X
		PK.CC.3. Understand the relationships between numerals and quantities up to ten.	X	X					X
		PK.CC.4. Count many kinds of concrete objects and actions up to ten, using one-to-one correspondence, and accurately count as many as seven things in a scattered configuration. Recognize the “one more,” “one less” patterns.	X	X		X			X
		PK.CC.5. Use comparative language, such as more/less than, equal to, to compare and describe collections of objects.	X	X		X			X
PreK	**Operations and Algebraic Thinking**	**PK.OA.1.** Use concrete objects to model real-world addition (putting together) and subtraction (taking away) problems up through five.	X	X		X			X
PreK	**Measurement and Data**	**PK.MD.1.** Recognize the attributes of length, area, weight, and capacity of everyday objects using appropriate vocabulary (e.g., long, short, tall, heavy, light, big, small, wide, narrow).	X	X		X			X
		PK.MD.2. Compare the attributes of length and weight for two objects, including longer/shorter, same length; heavier/lighter, same weight; holds more/less, holds the same amount.	X	X		X			X
		PK.MD.3. Sort, categorize, and classify objects by more than one attribute.	X	X		X			X
		PK.MD.4. Recognize that certain objects are coins and that dollars and coins represent money.				X			
K	**Counting and Cardinality**	**K.CC 3.** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).	X	X		X			X

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K	Counting and Cardinality	**K.CC 4.** Understand the relationship between numbers and quantities; connect counting to cardinality.	X	X		X			X
		K.CC 5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	X	X		X			X
		K.CC 6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group for groups with up to ten objects, e.g., by using matching and counting strategies.	X	X		X			X
K	Operations and Algebraic Thinking	**K.OA 1.** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	X	X		X			X
		K.OA 2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	X	X		X			X
		K.OA 3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).	X	X		X			X
		K.OA 4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	X	X		X			X
		K.OA 5. Fluently add and subtract within 5 including zero.	X	X		X	X		X
K	Measurement and Data	**K.MD 1.** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	X	X		X			X

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K	Measurement and Data	**K.MD 2.** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*	X	X		X			X
		K.MD 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count for category counts up to and including 10.	X	X		X			X
G1	Operations and Algebraic Thinking	**1.OA 1.** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations (number sentences) with a symbol for the unknown number to represent the problem.	X	X		X	X		X
		1.OA 2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	X	X		X	X		X
		1.OA 5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	X	X		X	X		X
G1	Measurement and Data	**1.MD 1.** Order three objects by length; compare the lengths of two objects indirectly by using a third object.				X			X
		1.MD 4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	X	X		X			X
		1.MD 5. Identify the values of all U.S. coins and know their comparative values (e.g., a dime is of greater value than a nickel). Find equivalent values (e.g., a nickel is equivalent to five pennies). Use appropriate notation (e.g., 69¢). Use the values of coins in the solutions of problems (up to 100¢).				X			

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G2	Operations and Algebraic Thinking	**2.OA 1.** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem	X	X		X	X		X
		2.OA 3. Identify patterns in odd and even numbers using concrete models or drawings. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	X	X		X			X
		2.OA 4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	X	X		X			X
G2	Measurement and Data	**2.MD 8.** Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies (up to $10), using $ and ¢ symbols appropriately and whole dollar amounts. For example, if you have 2 dimes and 3 pennies, how many cents do you have? If you have $3 and 4 quarters, how many dollars or cents do you have? (Students are not expected to use decimal notation.)	X	X		X		X	
G3	Operations and Algebraic Thinking	**3.OA 1.** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, describe a context in which a total number of objects can be expressed as 5 × 7.*			X	X	X		X

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G3	**Operations and Algebraic Thinking**	**3.OA 2.** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. *For example, describe a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.*			**X**	**X**	**X**		**X**
		3.OA 3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.			**X**	**X**	**X**		**X**
		3.OA 5. Apply properties of operations to multiply. For example: When multiplying numbers order does not matter. If 6 □ 4 = 24 is known, then 4 □ 6 = 24 is also known (Commutative property of multiplication); The product 3 □ 5 □ 2 can be found by 3 □ 5 = 15 then 15 □ 2 = 30, or by 5 □ 2 = 10 then 3 □ 10 = 30 (Associative property of multiplication); When multiplying two numbers either number can be decomposed and multiplied; one can find 8 x 7 by knowing that 7 = 5 + 2 and that 8 □ 5 = 40 and 8 □ 2 = 16, resulting in 8 □ (5 + 2) = (8 □ 5) + (8 □ 2) = 40 + 16 = 56 (Distributive property); When a number is multiplied by 1 the result is the same number (Identity property of 1 for multiplication)			**X**	**X**	**X**		
		3.OA 6. Understand division as an unknown-factor problem. *For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.*			**X**	**X**	**X**		**X**

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G3	**Operations and Algebraic Thinking**	**3.OA 8.** Solve two-step word problems using the four operations for problems posed with whole numbers and having whole number answers. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies, including rounding. (Students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order.)	**X**		**X**	**X**	**X**		**X**
G3	**Number and Operations in Base Ten**	**3.NBT 1.** Use place value understanding to round whole numbers to the nearest 10 or 100.	**X**	**X**	**X**	**X**	**X**		**X**
		3.NBT 2. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations. A range of algorithms may be used.			**X**		**X**		
G3	**Measurement and Data**	**3.MD 1.** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.			**X**				
		3.MD 2. Measure and estimate liquid volumes and masses of objects using standard metric units of grams (g), kilograms (kg), and liters (l).17 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same metric units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	**X**	**X**	**X**	**X**			**X**

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G3	Measurement and Data	**3.MD 3.** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	X	X	X	X	X	X	X
G4	Operations and Algebraic Thinking	**4.OA 1.** Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.			X	X	X		X
		4.OA 2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison	X	X	X	X	X		X
		4.OA 3. Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	X	X	X	X	X		X
G4	Number and Operations in Base Ten	**4.NBT 3.** Use place value understanding to round multi-digit whole numbers less than or equal to 1,000,000 to any place.	X	X	X	X	X		X
		4.NBT 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.	X	X	X	X	X		X

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G4	**Number and Operations in Base Ten**	**4.NBT 6.** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	X	X	X	X	X		X
G4	**Measurement and Data**	**4.MD 2.** Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	X	X	X	X	X	X	X
G5	**Number and Operations in Base Ten**	**5.NBT 4.** Use place value understanding to round decimals to any place.				X	X		X
		5.NBT 5. Fluently multiply multi-digit whole numbers using the standard algorithm.	X		X	X	X		X
		5.NBT 6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	X		X	X	X		X
		5.NBT 7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction (and between multiplication and division); relate the strategy to a written method and explain the reasoning used.				X	X		

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G5	Number and Operations-Fractions	**5.NF 3.** Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret ¾ as the result of dividing 3 by 4, noting that ¾ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size ¾. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*	X	X	X	X	X		X
		5.NF 4a. Interpret the product (a/b) × q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a × q ÷ b. *For example, use a visual fraction model and/or area model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15 . (In general, (a/b) × (c/d) = ac/bd .)*	X	X	X	X	X		X

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G5	**Number and Operations-Fractions**	**5.NF 5.** Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. *For example: 6 x 3/4 is twice as large as 3 x 3/4.* b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence a/b = (n × a)/(n × b) to the effect of multiplying a/b by 1.	**X**	**X**	**X**		**X**		**X**
G5	**Number and Operations-Fractions**	**5.NF. 6.** Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	**X**	**X**	**X**	**X**	**X**		**X**
G5	**Measurement and Data**	**5.MD 1.** Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real-world problems.	**X**	**X**	**X**		**X**		**X**
G5	**Geometry**	**5.G 2.** Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	**X**	**X**	**X**	**X**	**X**	**X**	**X**

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G6	Ratios and Proportional Relationships	**6.RP 1.** Understand the concept of a ratio including the distinctions between part:part and part:whole and the value of a ratio; part/part and part/whole. Use ratio language to describe a ratio relationship between two quantities. For example: The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every two wings there was one beak; For every vote candidate A received, candidate C received nearly three votes, meaning that candidate C received three out of every four votes or ¾ of all votes.	X	X	X	X	X	X	X
		6.RP 2. Understand the concept of a unit rate a/b associated with a ratio a:b with b □ 0, and use rate language in the context of a ratio relationship, including the use of units. For example: This recipe has a ratio of three cups of flour to four cups of sugar, so there is ¾ cup of flour for each cup of sugar; We paid $75 for 15 hamburgers, which is a rate of five dollars per hamburger.	X	X	X	X	X	X	X
		6.RP 3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	X	X	X	X	X	X	X
G6	The Number System	**6.NS 5.** Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative integers and other rational numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.				X	X		

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G6	Expressions and Equations	**6.EE 6.** Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	X	X	X	X	X		X
		6.EE 7. Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q for cases in which p, q, and x are all nonnegative rational numbers.	X	X	X	X	X		X
		6.EE 8. Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	X	X					X
		6.EE 9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.*	X	X	X	X	X	X	X
		6.SP 1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.*	X	X	X		X		X

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G6	Statistics and Probability	**6.SP 4.** Display numerical data in plots on a number line, including dot plots, histograms, and box plots. MA.4.a.Read and interpret circle graphs.	X	X	X	X	X	X	X
		6.SP 5. Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median, and/or mean) and variability (range and/or interquartile range), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	X	X	X	X	X	X	X
G7	The Number System	**7.NS 3.** Solve real-world and mathematical problems involving the four operations with integers and other rational numbers.	X	X	X	X	X		X
G7	Expressions and Equations	**7.EE 3.** Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9¾ inches long in the center of a door that is 27½ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.*	X	X	X	X	X		X

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G7	Expressions and Equations	**7.EE 4.** Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.	X	X		X			X
G7	Statistics and Probability	**7.SP 2.** Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*	X						X
		7.SP 3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team and both distributions have similar variability (mean absolute deviation) of about 5 cm. The difference between the mean heights of the two teams (10 cm) is about twice the variability (5 cm) on either team. On a dot plot, the separation between the two distributions of heights is noticeable.	X	X					X
G8	Expressions and Equations	**8.EE 5.** Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*					X	X	

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G8	Statistics and Probability	**8.SP 1.** Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.					X	X	
		8.SP 2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.					X		
G8	Statistics and Probability	**8.SP 3.** Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*					X		
		8.SP 4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*	X				X		X
HS (N)	Quantities	**N-Q 3.** Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. *					X		X

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HS(A)	**Creating Equations**	**A-CED 1.** Create equations and inequalities in one variable and use them to solve problems. (Include equations arising from linear and quadratic functions, and simple root and rational functions and exponential functions.)	X	X			X		X
		A-CED 3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.* *					X		
HS (F)	**Building Functions**	**F-BF 1.** Write a function (linear, quadratic, exponential, simple rational, radical, logarithmic, and trigonometric) that describes a relationship between two quantities.					X		X
HS (F)	**Linear, Quadratic, and Exponential Models**	**F-LE 1.** Distinguish between situations that can be modeled with linear functions and with exponential functions. *					X		
		F-LE 2. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).					X		
HS (S)	**Interpreting Categorical and Quantitative Data**	**S-ID 1.** Represent data with plots on the real number line (dot plots, histograms, and box plots). *	X	X	X	X	X	X	X
		S-ID 2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. *	X	X	X	X	X		X
		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). *	X	X	X	X	X		X

THE GREEN TEAM Activities and Lesson Plans Alignment with the Massachusetts Curriculum Framework for Mathematics, June 2017

Grade	Strand	Learning Standard	Slash Trash	Waste Free Day	Set up School Recycling Program	Rummage Sale/Drive Collecting Recyclables	Climate Change Scorecard	Create Signs and Posters	Composting
HS (S)	Interpreting Categorical and Quantitative Data	**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. *	X	X	X	X	X		X
		S-ID 6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. *	X	X	X	X	X	X	X
		S-ID 7. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. *	X	X	X	X	X		X
		S-ID 8. Compute (using technology) and interpret the correlation coefficient of a linear fit. *	X	X	X	X	X		X
HS (S)	Interpreting Categorical and Quantitative Data	**S-ID 9.** Distinguish between correlation and causation. *	X	X	X	X	X		X
HS (S)	Making Inferences and Justifying Conclusions	**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?* *					X		
		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. *	X	X	X	X	X		X
		S-IC 5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. *	X	X					X