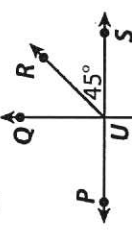


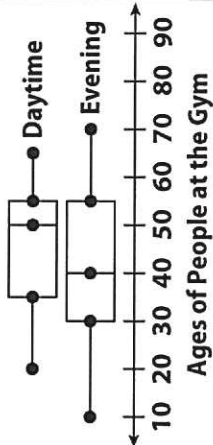
Essential Standards Chart: What is it we expect students to learn?

Grade:	7	Subject:	Math	Semester	Fall/Spring	Team Members:	Charity Anderson Sara Adams	Jessi Giles Rhonda Ringstaff	Stacey Thomas Mickey Hill
Standard Description	Example Rigor				Prerequisite Skills	Common Assessment	When Taught?	Extension Standards	
What is the essential standard to be learned? Describe in student-friendly vocabulary.	What does proficient student work look like? Provide an example and/or description.				What prior knowledge, skills, and/or vocabulary is/are needed for a student to master this standard?	What assessment(s) will be used to measure student mastery?	When will this standard be taught?	What will we do when students have learned the essential standard(s)?	
I can solve problems involving unit rates and complex fractions.	Joel paints $\frac{1}{4}$ of a wall in $\frac{1}{2}$ of an hour. How much of the wall can Joel paint in one hour?				<ul style="list-style-type: none"> -Division of Fractions -Unit rate problems involving whole numbers (6th grade skill) -Definition of unit rate and complex fraction 	7.RP.1 Common Assessment, includes MC and SA questions	August	<ul style="list-style-type: none"> -Introduction to graphing proportional relationships -Students will relate their unit rate knowledge to the 8th grade concept of slope. 	
I can solve multi-step percent problems involving discounts or mark-ups and sales tax.	Isaac purchased a pair of jeans for \$49.99 and a new shirt for \$34.99. If Isaac has a coupon for 30% off his purchase, calculate the final price of both items including a 6% sales tax.				<ul style="list-style-type: none"> -Vocab-Percent, discount, mark-up, sales tax -The understanding that percentages are out of 100. -Solve one step problems involving the percent proportion (is/of=%/100) -Dissect word problems to determine whether a mark-up or mark-down is being utilized. -Conversion between fractions, decimals, and percent. 	Common Assessment over 7.RP.3-This is an Extended Response Question.	Early September	<ul style="list-style-type: none"> -Percent of Change -Percent Error -Simple Interest 	

<p>I can add and subtract integers (positive and negative whole numbers) without a calculator.</p>	<p>The temperature in Anchorage Alaska is -2 degrees at 8 AM and 23 degrees at 3 PM. Express the change in temperature as an integer.</p>	<p>-Integers (understand real-world applications of positive and negative numbers) -Basic addition and subtraction fluency (no calculator) -Ability to graph integers on a number line</p>	<p>-Addition/subtraction of integers common assessment -Includes both simple computation problems and word problems</p>	<p>End of September</p>	<p>Students will apply their addition /subtraction of integers skills to operations with positive and negative fractions and decimals.</p>
<p>I can multiply and divide integers (positive and negative whole numbers) without a calculator.</p>	<p>$\frac{-4(2 + -3) - 7}{-5}$ ** Students must apply PEMDAS.</p>	<p>-Integers -Basic multiplication and division fluency (no calculator) -Ability to graph integers on a number line -PEMDAS (Order of Ops)</p>	<p>-Addition/subtraction of integers common assessment -Includes both simple computation problems and word problems -Includes all 4 integer operations within the order of operations</p>	<p>October (right after Fall Break)</p>	<p>Students will apply their multiplication /division of integers skills to operations with positive and negative fractions and decimals.</p>
<p>I can simplify an expression by combining like terms.</p>	<p>Simplify the expression. $-8(4x - 2) + 12x - 2x^2$</p>	<p>-Integer Operations -Identify Like Terms Vocab (Expression, Like Terms, Constant, Coefficient, Variable) -Distributive Property</p>	<p>Common Assessment over Simplifying Expressions (MC and SA)</p>	<p>Early November</p>	<p>-Students identify types of polynomials -Add/Sub of polynomials -FOIL method -Multiplication of monomials by binomials **These concepts are emphasized strongly in Pre-Algebra and Accelerated Math to enhance Algebra 1 readiness.</p>

<p>I can fluently write and solve a two-step equation.</p>	<p>Olivia purchased movie tickets for each member her family and also a family size box of popcorn. Each movie ticket cost \$7.50 and a family size box of popcorn cost \$12.00. If Olivia spent \$42.00 total, write and solve a two-step equation to determine how many movie tickets she purchased.</p>	<p>-Vocab (equation, variable, term, coefficient) -One step equations -Operations with all types of rational numbers -Substitution of a variable value to check an equation</p>	<p>Target Check- Extended Response Question</p> <p>Late November/December</p>	<p>-Multi-Step Inequalities (Solve and Graph) -Multi-step equations including the distributive property, combining like terms and variables on both sides. Multi-step equations are strongly emphasized in Pre-Algebra and Accelerated Math to enhance Algebra 1 readiness.</p>
<p>I can solve problems involving complementary, adjacent and vertical angles.</p>	<p>Use the diagram for 8–9.</p>  <p>8. What is the measure of $\angle RUP$?</p> <p>A 45° B 90° C 135°</p> <p>9. Which describes the relationship between $\angle TUP$ and $\angle TUS$?</p> <p>A adjacent angles B complementary angles C vertical angles</p>	<p>Basic Angle Vocab- Acute, Obtuse, Right, Straight -Ability to classify angles based on the number of degrees.</p>	<p>Common Assessment- MC and SA questions over angles</p> <p>January</p>	<p>-Students can be exposed to 8th grade angle content involving interior and exterior angles on parallel lines.</p>

<p>I can calculate the area and circumference of a circle.</p>	<p>CCMS is redoing the floor of their basketball gymnasium. They plan to outline the center circle of the basketball court in red and fill it in with blue. Calculate how much space each color of paint will cover given that the center circle has a diameter of 6ft.</p>	<p>-Parts of a circle vocab (center, radius, diameter, circumference, area) -Area of basic 2D shapes including triangles, trapezoids and parallelograms. -Understanding of the concept of Pi and its equivalency to 3.14.</p>	<p>Common Assessment- This is an Extended Response Question.</p>	<p>February</p>	<p>-Area and perimeter of compound figures composed of circles, triangles, trapezoids and parallelograms.</p>
<p>Students will solve problems involving simple and compound probability.</p>	<p>There are 8 green, 4 red, 6 blue and 2 white marbles in a bag. What is the probability of drawing a green marble and then a red marble given that the first marble drawn is not replaced?</p>	<p>-Probability of simple events -Ability to write and reduce fractions -Multiplication of fractions -Independent and Dependent Events -Understanding of probability on a scale from 0-1 or 0-100% -Certain, Impossible, Equally Likely, Unlikely, Equally Likely Events</p>	<p>Common Assessment over Probability- Multiple Choice</p>	<p>March</p>	<p>-Multi-step probability problems (more complex) -Combinations and permutations</p>

<p>I can calculate the measures of central tendency (mean, median and mode) and variation (range, MAD, IQR) for a set of data.</p>	<p>Use the box plots for 3 and 4.</p>  <p>Ages of People at the Gym</p> <p>3. What are the two medians?</p> <p>A 10 and 10 B 30 and 35 C 40 and 50 D 70 and 65</p> <p>4. Which group has a wider spread?</p> <p>A Daytime people B Evening people C They have the same number. D You cannot tell from the box plots.</p>	<p>-Vocabulary (Data, Statistics, Measures of Central Tendency, Measures of Variation) -Mean, Median, Mode, Range, Interquartile Range (IQR), Mean Absolute Deviation (MAD) -Ability to construct/interpret box plots and box and whisker plots and identify basic parts of each.</p>	<p>Common Assessment- Multiple Choice</p>	<p>April</p>	<p>-Students are introduced to the concepts of bias and misleading statistics and how they might impact data measures. -Variance, Standard Deviation</p>
--	---	---	--	--------------	---