**Lesson Plan~The Academy for Technology & the Classics~Cultivating Fearless Learners**

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| **Instructor’s name: Shain, Gotcher, Bryant** | **Course/Grade: Assistive Reading/Math 7th grade** |
| **Week of: March 14th-March 18th** | **Unit Name:**  Using logical reasoning to solve multi-step, real life word problems, working with integers: linear equations single-step equations and two-step equation and generate a sample problem, finding range, slope, and creating a set of ordered pairs, building vocabulary and automation of basic math facts. Reading comprehension based on Literature Circles-from reading Hatchet, finding text--based evidence to support: literary elements such as: theme, mood, setting, comprehension questions, building vocabulary, writing “perfect paragraphs” using the 1,2,3 format. Students will be practicing for PARCC completing grammar practice problems and reading short passages completing comprehension problems. |

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| ***(1A)\**Essential Question(s):**  **MATH:** **Tuesdays & Thursdays**  How to develop a better understanding of how to solve single-step equations and transfer knowledge and apply this information to successfully solve two-step equations. In addition how to remember how to multiply and or divide with signed integers; use and understand the rules and how it applies to the sign of the answer. In addition develop a better understanding of how to add and subtract with integers using  The negative of a negative is the opposite positive number. That is, for real numbers, **- (- a ) = + a**  Or using the number line:  Add a positive integer by moving to the right on the number line   * Add a negative integer by moving to the left on the number line * Subtract an integer by adding its opposite   **READING**: **Monday, Wednesday and Fridays**  For weeks 3/14-3/18 and 3/21-3/24 Students will be practicing for PARCC completing grammar practice problems and reading short passages completing comprehension problems. | ***(1A/1B)* Connections (prior/future learning): Prior learning and practice working through, basic math facts, utilizing vocabulary such as: slope, relation, function, domain, range, ordered pair, mapping, input, output word problem, working problems using integers-using the additive inverse and multiplicative inverse, determining if ordered pairs are solutions to an equation, utilizing word problem programs such as Kuta Software, Empires, Khan Academy and Mid-school math.**  **Prior learning of decoding, inferring and synthesizing meaning from text based questions to clarify, build understanding and develop a thesis statements supported by quotes from reading, using the “perfect paragraph” format (1,2,3)**  **Students will be practicing for PARCC completing grammar practice problems and reading short passages completing comprehension problems.** |
| ***(1A)* Common Core/State Standards: The Number System 7.NS**  1. Apply and extend previous understandings of operations with  fractions to add, subtract, multiply, and divide rational numbers.  2. Apply and extend previous understandings of multiplication and  division and of fractions to multiply and divide rational numbers.  3. Use proportional relationships to solve multi-step ratio and percent  problems. Examples: simple interest, tax, markups and markdowns,  gratuities and commissions, fees, percent increase and decrease, percent  error.  Expressions and Equations 7.EE  Use properties of operations to generate equivalent expressions.  1. Apply properties of operations as strategies to add, subtract, factor,  and expand linear expressions with rational coefficients.  2. Understand that rewriting an expression in different forms in a  problem context can shed light on the problem and how the quantities  in it are related.  Solve real-life and mathematical problems using numerical and  algebraic expressions and equations.  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.  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.  a. Solve word problems leading to equations of the form px + q = r  and p(x + q) = r, where p, q, and r are specific rational numbers.  Solve equations of these forms fluently. Compare an algebraic  solution to an arithmetic solution, identifying the sequence of the  operations used in each approach.    ELA - Key Ideas and Details  1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual  evidence when writing or speaking to support conclusions drawn from the text.  2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details  and ideas.  3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.  Craft and Structure  4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative  meanings, and analyze how specific word choices shape meaning or tone.  5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text  (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.  6. Assess how point of view or purpose shapes the content and style of a text.  Integration of Knowledge and Ideas  7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as  well as in words.\*  8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as  the relevance and sufficiency of the evidence.  9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the  approaches the authors take.  Range of Reading and Level of Text Complexity  10. Read and comprehend complex literary and informational texts independently and proficiently. | |
| ***(1E)* Other considerations (modifications, accommodations, acceleration, ELL, etc.**  **All accommodations and modifications indicated in student IEPs will be followed. Any needs of ELL students (modification of assignment length, modification of assignment complexity, modification of source reading, etc.) will be implemented.** | ***(1D)* Resources/Materials:**  **Chromebooks, Grade-level reading comprehension material, math maps, Khan Academy, Empires, Mid-School Math, Kuta Software, Graphic Organizers, Fray Square Templates, Manipulatives, flash cards and math drill games, Math Problem Solver Program “Math Journaling”**  **Achieve the Core short story excerpts, and other selected short stories designed for building fluency, comprehension, vocabulary and understanding of the main idea by answering text-based questions. Students will formulate 3-5 paragraph papers explaining their understanding of the excerpts. Building on prior learning of decoding, inferring and synthesizing meaning from text based questions to clarify, build understanding and develop a thesis statements supported by quotes from reading, using the “perfect paragraph” format (1,2,3). Students will be practicing for PARCC completing grammar practice problems and reading short passages completing comprehension problems.** |
| ***(1F)* Assessment (How will you monitor progress and know students have successfully met outcomes? What happens when students understand and when they don’t understand? Checking for understanding, clarifying, using simplified and/or repeated directions, re-teaching, small group instruction**  **Daily: Vocabulary Review, Writing 3-5 Paragraph papers using the “perfect paragraph format-1,2,3”, Writing- Revisions, Reading Comprehension, Multiple choice practice, Math Drills, Khan Academy, Empires, creating math maps, creating flash cards, Solving word problems in addition to student created word problems, familiarizing with ordered pairs, finding slope, range and creating a set of ordered pairs, linear equations, finding input and output values, Students will identify slope between two ordered pairs.**  **This Week: Students will be practicing for PARCC completing grammar practice problems and reading short passages completing comprehension problems.**  **Students reviewing and practicing work with linear equations working through solutions to single-step and two step equations.**  **Math Drills, Khan Academy, Empires, working multiplication math drills, familiarizing with ordered pairs, finding slope, range and creating a set of ordered pairs, linear equations and finding input and output values.** | |

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| MONDAY-  **I will begin practicing for the PARCC ELA exam, working on sample sentences and analyze grammar, punctuation and sentence structure.**  ***1C)* Learning Target: “I will work through sample PARCC sentences and analyze grammar, punctuation and sentence structure developing an understanding as to what is grammatically correct and is not”.**  ***(1C)* Do Now: Write a sentence, switch with a partner and determine if it is grammatically correct** | (***1F)*Embedded Formative Assessment:**  **“I will work through sample PARCC sentences and analyze grammar, punctuation and sentence structure developing an understanding as to what is grammatically correct and is not”.**  **Work samples will be collected as a ticket out at the end of the period.**  ***(1B)*Closing Activity: The Umm game** |
| TUESDAY- **I will develop a better understanding of Solve Real-Life And Mathematical Problems Using Numerical And Algebraic Expressions And Equations.**  **Refer to website**  [**http://achievethecore.org/coherence-map/#7/30/310/310/1**](http://achievethecore.org/coherence-map/#7/30/310/310/1)  **7 E.E. Domain**  **7E.E. B.3. Standard**  ***(1C)* Do Now: Timed multiplication math table** | ***1F)*Embedded Formative Assessment: Students will develop a better understanding of how 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.**  **Formative testing example task stained glass:**  [**http://achievethecore.org/coherence-map/#7/30/310/310/1**](http://achievethecore.org/coherence-map/#7/30/310/310/1)  **Whole group share out** |
| WEDNESDAY- Reading/Writing  ***(1C)* Learning Target: I will begin practicing for the PARCC ELA exam, working on sample sentences and analyze grammar, punctuation and sentence structure.**  ***1C)* Learning Target: “I will work through sample PARCC sentences and analyze grammar, punctuation and sentence structure developing an understanding as to what is grammatically correct and is not”.**  ***(1C)* Do Now: Write a gramtically incorrect sentence, switch with a partner and determine how to make it grammatically correct** | (***1F)*Embedded Formative Assessment: “I will work through sample PARCC sentences and analyze grammar, punctuation and sentence structure developing an understanding as to what is grammatically correct and is not”.**  **Work samples will be collected as a ticket out at the end of the period.**  ***(1B)*Closing Activity: Following directions** |
| THURSDAY-MATH  ***(1C)* Learning Target:**  **Students will practice multiplication facts in form of completing a multiplication table in order to better understand basic fact automaticity in preparation for moving into Algebra I.**  ***(1C)* Do Now: Timed multiplication math table** | ***(1F)*Embedded Formative Assessment: Students will develop a better understanding of basic math facts in order to develop automaticity in order to transition onto Algebra I.**  **Students will log-in to quizziz.com to take two practice quizzes to assist with automaticity of basic facts.**  **Practice on worksheet with samples of two-step problems**  **Students will work out as a group on the SmartBoard**  **Use the analogy of Teenage Mutant Ninja Turtles:**  **The variable is the turtle and all of the numbers and operations are the bad guys. First you have to figure out the bad guy’s move, then the turtle performs a counter move. You don’t have to write it on both sides because you know the bad guy goes poof! Then deal with the second bad guy. Finally the turtle escapes from the alley (all by him or herself).**  **2y + 3 = 15**  **2y = 15 - 3 First bad guy is +3. Counter -3.**  **2y/2 = 12/2 Second bad guy is times 2. Counter /2.**  **y = 6 Turtle escapes bad guys.**  ***(1B)*Closing Activity: Around the world math drills** |
| FRIDAY-Reading/Writing***(1C)* Learning Target: I will begin practicing for the PARCC ELA exam, working on sample sentences and analyze grammar, punctuation and sentence structure.**  ***1C)* Learning Target: “I will work through sample PARCC sentences and analyze grammar, punctuation and sentence structure developing an understanding as to what is grammatically correct and is not”.**  ***(1C)* Do Now: Name one grammar rule you have learned this week.** | **(*1F)*Embedded Formative Assessment: “I will work through sample PARCC sentences and analyze grammar, punctuation and sentence structure developing an understanding as to what is grammatically correct and is not”.**  **Work samples will be collected as a ticket out at the end of the period.**  ***(1B)*Closing Activity: The Umm game** |

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| \*Refers to NMTEACH Rubric:  1A-Demonstrating knowledge of content  1B-Designing coherent instruction  1C-Setting Instructional outcomes  1D-Demonstrating knowledge of resources  1E-Demonstrating knowledge of students  1F-Designing student assessment | Formative Assessment includes, but is not limited to:  Exit tickets, white board response, consensagrams, red/green cards, formal or informal student conferences, sticky note assessment. |