**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: 11/30-12/4** | **Unit Name:**  Using logical reasoning to solve multi-step, real life word problems, working with integers: single-step equations and two-step equations, building vocabulary of Additive Inverse and Multiplicative Inverse. Reading comprehension of readings from Achieving The Core: discussing summary of main idea, comprehension questions, building vocabulary, writing “perfect paragraphs” using the 1,2,3 format. |

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| ***(1A)\**Essential Question(s):**  **MATH:** **Tuesdays & Thursdays**  How to use logic reasoning to solve a multi-step real-life mathematical problem and generate a sample problem on your own?  How to solve a single-step equation using the additive or multiplicative inverse?  **READING**: **Monday, Wednesday and Fridays**  They will be reading a short story from “Achieving the Core-Fluency Packet for 6-8th grade “practicing for accuracy and fluency. Students will answer text-based questions and expand vocabulary to support and build understanding of text, creating a “perfect paragraph” using the 1,2,3 format. | ***(1A/1B)* Connections (prior/future learning): Prior learning and practice working through word problem, working problems using integers-using the additive inverse and multiplicative inverse, utilizing word problem programs such as 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)** |
| ***(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 for building fluency, comprehension and understanding of the main idea. 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)** |
| ***(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, Solving word problems in addition to student created word problems**  **This Week: Writing Perfect Paragraph papers using the (1,2,3 format), Writing- Revisions, Reading Comprehension, Math Solver Program-Solving word problems-student created word problems, students reviewing and practicing work with integers and single-step and two step equations.** | |

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| MONDAY- Reading/Writing  ***(1C)* Learning Target: Reading short-story-Achieving the Core “Decades Later, Student Finds Teacher to Say ‘Thank You’-by NPR Staff, Using the “Perfect Paragraph” format (1,2,3)**  **“I will use the “perfect paragraph” format of 1,2,3 and gather text based evidence to support a deeper understanding of the story”**  ***(1C)* Do Now: Do you recall a time as a student that a teacher was kind to you?** | (***1F)*Embedded Formative Assessment: Developing an understanding of what it means to give back, based on text-dependent questions, discussion and determining quotes that support a “perfect paragraph” using the 1,2,3 format.**  **Final draft and will be formulated/collected by the end of the period.**  ***(1B)*Closing Activity: Following directions** |
| TUESDAY- Math  ***(1C)* Math Solver Program-Solving Math Problems using logical reasoning strategy-using the four step method (FIND OUT, CHOOSE A STRATEGY, SOLVE IT, LOOK BACK)**  ***(1C)* Learning Target: Students will demonstrate how to solve a “logical reasoning” word problem using the 4-step method. Students will create their own math problem collectively and share with classmates**  ***(1C)* Do Now: Math drills 11’s and 12’s** | ***1F)*Embedded Formative Assessment: Successful solving of the word problem using a 4-step method (FIND OUT, CHOOSE A STRATEGY, SOLVE IT, LOOK BACK)**  **and then they will generate their own word problem modeled after example.**  **Closing Activity: Students will trade word problems and solve eachothers word-problems.**  **Rubric-Rate your word problem based on the rubric**  ***(1B)*Students will play Around the World as an exit strategy** |
| WEDNESDAY- Reading/Writing  ***(1C)* Learning Target : Reading short story- Continuation of Achieving the Core “Decades Later, Student Finds Teacher to Say ‘Thank You’-by NPR Staff, Using the “Perfect Paragraph” format (1,2,3)**  **“I will use the “perfect paragraph” format of 1,2,3 and gather text based evidence to support a deeper understanding of the story”**  ***(1C)* Do Now: Have you shared an act of kindness with someone in need?** | (***1F)*Embedded Formative Assessment: Developing an understanding of what it means to give back, based on text-dependent questions, discussion and determining quotes that support a “perfect paragraph” using the 1,2,3 format.**  **Final draft and will be formulated/collected by the end of the period.**  ***(1B)*Closing Activity: quizizz.com-vocabulary from short story** |
| THURSDAY-MATH  ***(1C)* Learning Target: I will solve single-step equations using the additive or multiplicative inverse process.**  ***(1C)* Do Now: Math Drills whole class 12’s** | (***1F)*Embedded Formative Assessment: Students will build math skills practicing solving single-step equations (previously taught in Pre-Algebra class on Mon. 11/30 and 12/1 using the additive or multiplicative inverse process.**  **They will take part in joining a quiz on quizizz.com that accesses students automaticity solving one-step equations. They will be timed and review the problems they get wrong. In two columns they will record what type of equation they are solving: additive or multiplicative. Teacher will review scores and identify the most commonly missed problem and review whole group.**  **\*If there is time, the students will take another single-step solution quiz.**  ***(1B)*Closing Activity: (Ticket out) Self-reflection based on provided rubric** |
| FRIDAY-Reading/Writing  ***(1C)* Learning Target: “A God Who Remembers” By Elie Wiesel Using the “Perfect Paragraph” format (1,2,3)**  ***(1C)* Do Now: What is one thing you remember about a past event that has lasting effects on you?** | **(*1F)*Embedded Formative Assessment: Developing an understanding of what the behaviors of the humans means based on text-dependent questions, discussion and determining quotes that support paper.**  ***(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. |