**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: 10/19­10/23**   | **Unit Name:**  Using logical reasoning to solve multi­step, real life word problems Reading comprehension, summary of main idea and continuation of Pasatiempo Writing contest essay   |

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| ***(1A)***​***\****​**Essential Question(s):**   MATH: How will you use logic reasoning to solve a multi­step real­life mathematical problem and produce a sample problem on your own?  | ***(1A/1B)***​ **Connections (prior/future learning): Prior learning and practice working through word problem solver program, utilizing word problem programs such as Empires, Khan Academy and Mid­school math program.**   |
| ***(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 multi­step 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 real­life and mathematical problems using numerical and algebraic expressions and equations. 1. Solve multi­step real­life 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.
2. Use variables to represent quantities in a real­world 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. 1. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas 1. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.\*
2. 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.
3. 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 1. Read and comprehend complex literary and informational texts independently and proficiently.
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| ***(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, Grade­level reading comprehension material, math maps, Khan Academy, Graphic** **Organizers, Fray Square Templates, Manipulatives, flash cards and math drill games, Math Problem Solver** **Program**   |
| ***(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, re­teaching, small group instruction** **Daily: Vocabulary Review, Writing 5 Paragraph papers, Writing­ Revisions, Reading Comprehension, Multiple choice practice, Math Drills, Khan Academy, Math Maps, Solving word problems­student created word problems**  **This Week: Writing 5 Paragraph papers, Writing­ Revisions, Reading Comprehension, Math Solver Program­Solving word problems­student created word problems**  |

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| MONDAY­ Reading/Writing ***(1C)***​ **Learning Target: Continuation of paper submitted for the 2015 Pasatiempo annual writing contest** ***(1C)***​ **Do Now: Grammar practice**  |  (***1***​***F)***​**Embedded Formative Assessment: Understanding of self­editing and writing format­completion of a rough draft** ***(1B)***​**Closing Activity: Around the world**  |
| TUESDAY­ ½ Reading/Writing &/1/2 Math­ **Achieving**​  **the Core­ “The Treasure of Lemon Brown” by: Walter** **Dean Myers** ***(1C)***​ **Learning Target: Students will answer text­based questions and vocabulary by developing an understanding of the short story “The Treasure of** **Lemon Brown”** ***(1C)* Do Now: What do you value as a treasure?**   |  (***1***​***F)***​**Embedded Formative Assessment: Students will answer text­based questions from the reading and develop an understanding of new vocabulary words from the short story.** ***(1B)***​**Closing Activity: Round the World** **(exit activity­Shown work from math problems)**  |

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| WEDNESDAY­Reading/Writing ***(1C)***​ **Learning Target: Continuation of “The Treasure of** **Lemon Brown” by: Walter Dean Myers** ***(1C)***​ **Learning Target: Students will answer text­based questions and vocabulary by developing an understanding of the short story “The Treasure of** **Lemon Brown”**   ***(1***​***C)***​ **Do Now: What amount would you attribute to your treasured item?**  |  (***1***​***F)***​**Embedded Formative Assessment: Students will answer text­based questions developing an understanding that a treasure is what is important to someone, not necessarily something that can be bought with money.** ***(1B)***​**Closing Activity: Following directions**  |
| THURSDAY­**Math Solver Program­Solving Math**​ **Problems using logical reasoning strategy­using 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** **4­step method.** ***(1C)***​ **Do Now: “Fourty is the only number in English that its letters in alphabetic order”**  |  (***1***​***F)***​**Embedded Formative Assessment: Successful solving of the word problem using a 4­step method and then writing their own word problem modeled after example. *(1B)***​**Closing Activity: Students will trade word problems and solve eachothers word­problems.** **● Students will play Around the World as an exit strategy**  |
| FRIDAY­Reading/Writing  ***(1***​***C)***​ **Learning Target: Continuation of paper submitted for the 2015 Pasatiempo annual writing contest** ***(1C)* Do Now: What**  |  **(*1***​***F)***​**Embedded Formative Assessment: Write a summary of the story** ***(1B)***​**Closing Activity: Follow directions activity**  |

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\*Refers to NMTEACH Rubric:

1A­Demonstrating knowledge of content

1B­Designing coherent instruction

1C­Setting Instructional outcomes

1D­Demonstrating knowledge of resources

1E­Demonstrating knowledge of students

1F­Designing 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.