**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: February 29nd-March 4th** | **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. |

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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**They will be reading Hatchet by: Gary Paulson. Students will answer text-based questions, identify literary elements, 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, 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)** |
| ***(1A)* Common Core/State Standards: The Number System 7.NS**1. Apply and extend previous understandings of operations withfractions to add, subtract, multiply, and divide rational numbers.2. Apply and extend previous understandings of multiplication anddivision and of fractions to multiply and divide rational numbers.3. Use proportional relationships to solve multi-step ratio and percentproblems. Examples: simple interest, tax, markups and markdowns,gratuities and commissions, fees, percent increase and decrease, percenterror.Expressions and Equations 7.EEUse 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 aproblem context can shed light on the problem and how the quantitiesin it are related. Solve real-life and mathematical problems using numerical andalgebraic expressions and equations.3. Solve multi-step real-life and mathematical problems posed withpositive and negative rational numbers in any form (whole numbers,fractions, and decimals), using tools strategically. Apply properties ofoperations to calculate with numbers in any form; convert betweenforms as appropriate; and assess the reasonableness of answers usingmental computation and estimation strategies. 4. Use variables to represent quantities in a real-world or mathematicalproblem, and construct simple equations and inequalities to solveproblems by reasoning about the quantities.a. Solve word problems leading to equations of the form px + q = rand p(x + q) = r, where p, q, and r are specific rational numbers.Solve equations of these forms fluently. Compare an algebraicsolution to an arithmetic solution, identifying the sequence of theoperations used in each approach.  ELA - Key Ideas and Details1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textualevidence 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 detailsand ideas.3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.Craft and Structure4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurativemeanings, 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 Ideas7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, aswell as in words.\*8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well asthe 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 theapproaches the authors take.Range of Reading and Level of Text Complexity10. 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)** |
| ***(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: Reading Hatchet-Literature Circles, Writing Perfect Paragraph papers using the (1,2,3 format), Writing- Revisions, Reading Comprehension, 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 Ch.15 & 16 of Hatchet.** **I will begin a one paragraph response to with 2 text-based evidence as to support how Brian experienced many “First Days” in the Canadian Wilderness, explain how these events were “burned” into his mental journal.*****1C)* Learning Target: “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: Frayer Model for vocabulary: seep, lurch, vague, remnant, wither, agony, horde, nudge, pulverize glisten** |  (***1F)*Embedded Formative Assessment:** **Developing an understanding of what the “First Days” meant to Brian and how they were “burned” into his mental journal and why this was significant in his survival in the Canadian Wilderness experience shaped his new identity and new sense of self by use of quotes that support a “perfect paragraph” using the 1,2,3 format.****Final draft of text-based questions will be edited/collected by the end of the period Wednesday.*****(1B)*Closing Activity: The Umm game** |
| TUESDAY- NO SCHOOL | ***1F)*Embedded Formative Assessment:**  |
| WEDNESDAY- Reading/Writing***(1C)* Learning Target: I will begin Ch.15 & 16 of Hatchet.** **I will begin a one paragraph response to with 2 text-based evidence as to support how Brian experienced many “First Days” in the Canadian Wilderness, explain how these events were “burned” into his mental journal.****Explain and support two “first days” with TBE.****“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: Frayer Model for vocabulary: seep, lurch, vague, remnant, wither, agony, horde, nudge, pulverize glisten** |  (***1F)*Embedded Formative Assessment: Developing an understanding of what the “First Days” meant to Brian and how they were “burned” into his mental journal and why this was significant in his survival in the Canadian Wilderness experience shaped his new identity and new sense of self by use of quotes that support a “perfect paragraph” using the 1,2,3 format.****Final draft of text-based questions will be edited/collected by the end of the period today..*****(1B)*Closing Activity: Following directions** |
| THURSDAY-MATH***(1C)* Learning Target: Students will develop a better understanding of how to solve two step equations by applying single step equation knowledge to solve two-step equations.****See websites for a mini-lesson explaining solving two-step equations:**[**https://www.khanacademy.org/math/in-seventh-grade-math/simple-equations/equation-definition/v/why-we-do-the-same-thing-to-both-sides-two-step-equations**](https://www.khanacademy.org/math/in-seventh-grade-math/simple-equations/equation-definition/v/why-we-do-the-same-thing-to-both-sides-two-step-equations)**Or**[**https://www.khanacademy.org/math/algebra-basics/core-algebra-linear-equations-inequalities/core-algebra-solving-basic-equations/v/two-step-equations**](https://www.khanacademy.org/math/algebra-basics/core-algebra-linear-equations-inequalities/core-algebra-solving-basic-equations/v/two-step-equations)**Or**[**https://www.khanacademy.org/math/arithmetic/absolute-value/mult\_div\_negatives/v/multiplying-positive-and-negative-numbers**](https://www.khanacademy.org/math/arithmetic/absolute-value/mult_div_negatives/v/multiplying-positive-and-negative-numbers)**Or****https://www.khanacademy.org/math/arithmetic/absolute-value/mult\_div\_negatives/v/dividing-positive-and-negative-numbers****Or:**[**https://www.youtube.com/watch?v=KBpNLjiv8pk**](https://www.youtube.com/watch?v=KBpNLjiv8pk)**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 how to solve two step equations****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 finish Ch.15 & 16 of Hatchet.** **I will begin Ch. 17 & 18****I will begin a one paragraph response to with 2 text-based evidence as to: After the tornado exposes the tail of the sunken plane, Brian dives into the water and retrieves the survival kit that the pilot carried. He finds many things instrumental to his survival, what was the one item that was a turning point for him?****“I will use the “perfect paragraph” format of 1,2,3 and gather text based evidence to support a deeper understanding of the story”****Explain and support with 2 TBE*****(1C)* Do Now: Frayer Model for vocabulary: seep, lurch, vague, remnant, wither, agony, horde, nudge, pulverize glisten** | **(*1F)*Embedded Formative Assessment: Developing an understanding of what experience shaped his developing sense of awareness, as to how to use survival skills, by use of quotes that support a “perfect paragraph” using the 1,2,3 format.****Final draft of text-based questions will be edited/collected by the end of the period Friday or Monday 3/7.*****(1B)*Closing Activity: The Umm game** |

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| \*Refers to NMTEACH Rubric:1A-Demonstrating knowledge of content1B-Designing coherent instruction1C-Setting Instructional outcomes1D-Demonstrating knowledge of resources1E-Demonstrating knowledge of students1F-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.  |