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| **Afrocentric Applied Learning**  **Lesson Plan**  **Algebra & Financial Literacy** | | | | |
| **Title:** **Multiplier Effect of Black spending in and outside of Black Economy** | | | | |
| **Subject:** Algebra 1 | | | **Length of Time:** 1 week | |
| **Unit Summary:** The unit introduces the concepts of Algebra and reviews some skills from 8th grade. | | | | |
| **Learning Targets** | | | | |
| PARCC http://www.parcconline.org/sites/parcc/files/green.png Major Clusters;  http://www.parcconline.org/sites/parcc/files/blue.png Supporting Clusters;  http://www.parcconline.org/sites/parcc/files/yellow.png Additional Clusters | | | | |
| **Conceptual Category: Algebra Domain: Seeing Structure in Expressions** | | | | |
| **Cluster: Interpret the structure of expressions, create equations that describe numbers or relationships** | | | | |
| **Standard#:** | **Standard:** | | | |
| A-SSE.1 | Interpret expressions that represent a quantity in terms of its context. | | | |
| **Conceptual Category: Number and Quantity** | | | | |
| **Cluster: Use properties of rational and irrational numbers.** | | | | |
| **Standard#:** | **Standard:** | | | |
| N-RN.3 | Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. | | | |
| Domain: Standards for Math Practice | | | | |
| **Standard#:** | **Standard:** | | | |
| MP1 | Making sense of problems and persevere in solving them. | | | |
| MP2 | Reason abstractly and quantitatively. | | | |
| MP3 | Construct viable arguments and critique the reasoning of others. | | | |
| MP4 | Model with mathematics. | | | |
| MP5 | Use appropriate tools strategically | | | |
| MP6 | Attend to precision. | | | |
| MP7 | Look for and make use of structure. | | | |
| MP8 | Look for and express regularity in repeated reasoning. | | | |
| **Unit Essential Questions:**   * How How often does a dollar circulate in Black communities, before leaving them? * What would be the financial gain or impact on total Black economy if that number would match that of Asians or Jews for example? * What is the multiplier effect resulting from Black spending with Black businesses? * What is the total injection into the U.S economy resulting from current Black consumption patterns?? * Why are exponent properties important in mathematics? | | **Unit Enduring Understandings:**   * The set of real numbers has several special subsets related in particular ways. * The properties of real numbers are relationships that are true for all real numbers, except in one case, zero. * You can represent mathematical phrases and real-world quantities using algebraic expressions. * You can use substitution to evaluate an expression for a value. | | |
| **Unit Objectives:**   * *Students will be able to classify numbers in the real number system.* * *Students will be able to identify and combine like terms.* * *Students will be able to evaluate an expression for given values.* * *Students will be able to use exponent properties to simplify expressions.* * *Students will be able to put terms in order by the degree of a variable.* | | | | |
| **Evidence of Learning** | | | | |
| **Formative Assessments:**   * SMART Response questions used throughout the unit. * Labs | | | | |
| **Summative Assessment:**   * Quiz | | | | |
| **Lesson Plan** | | | | |
| **Topics** | | | | **Timeframe** |
| Topic #1: Calculate the general Multiplier effect for a $100 injection | | | | 1 day |
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| Topic #2: Calculate the Multiplier effect for a $1 trillion in African American income in a year. | | | | 1 day |
| Topic #3: Calculate the Multiplier effect for the total income of another ethnic group (i.e. Asian, Jewish, White, Latino@a) | | | | 1 day |
| Topic #4: Calculate the total injection into U.S. economies resulting from Black consumption | | | | 2 days |
| Topic #5: Make conjectures on how changing spending habits of Blacks can impact the Black economy. Quantify with examples if you can. | | | |
| **Curriculum Development Resources:**   * <http://www.njctl.org/courses/math/algebra-i/numbers-operations-and-expressions-algebra-1/> | | | | |
| **Lesson Components** | | | | |
| **21st Century Skills**   * Financial, Economic, Business, and Entrepreneurial Literacy   **21st Century Themes**   * Critical Thinking and Problem Solving * Communication and Collaboration * Life and Career Skills | | | | |