**

***MISSION***

***The Faculty and staff of Chadwick R-1 Schools in partnership with parents and the community, will establish high standards of learning and high expectations for achievement while providing comprehensive guidance for success****.*

*Subject: Algebra 1B*

*Grade Level: 9-12*

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| ***August/September/October:***  Reasoning with Equations ***10 Weeks*** |

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| **ESSENTIAL MEASURABLE LEARNING OBJECTIVES** | **CROSSWALK TO STANDARDS** | | | | |
| **GLEs/CLEs** | **PS**  **(Standards of Mathematical Practice)** | **CCSS** | **MATH** | **DOK**  **(per GLE/CLE)** |
| 1. Students will create equations and inequalities in one variable and use them to solve problems | A.2.A.A1 | 3.3 | A-CED.1 | MP3 | 3 |
| 1. Students will create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. | A.2.A.A1  A.3.A.A1  G.4.B.A1 | 3.3  1.6  3.3 | A-CED.2 | MP3  MP8  MP3 | 3  2  3 |
| 1. Students will represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. | A.2.D.A1  A.3.A.A1  G.4.B.A1 | 1.6  1.7  1.8 | A-CED.3 | MP8  MP3  MP6  MP7  MP6 | 2  2  3 |
| 1. Students will rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations | A.2.B.A1 | 3.2 | A-CED.4 | MP1 | 2 |
| 1. Students will explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. | A.2.B.A1  A.2.C.A1 | 3.2  3.2 | A-REI.1 | MP1  MP1 | 2  1 |
| 1. Students will solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. | A.2.A.A1 | 3.3 | A-REI.3 | MP3 | 3 |



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| ***October:***  Solving Quadratic Equations ***2 Weeks*** |

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| ESSENTIAL MEASURABLE LEARNING OBJECTIVES | CROSSWALK TO STANDARDS | | | | |
| GLEs/CLEs | PS | CCSS | MATH | DOK |
| 1. Students will solve problems that involve quadratic equations. | A.2.A.A1  A.2.B.A1 | 3.3  3.2 | A-SSE.1  A-SSE.2 | MP3  MP1 | 3  2 |
| 1. Students will use properties of mathematics to alter the structure of an expression and equation. | A.2.A.A1  A.2.B.A1 | 3.3  3.2 | A-SSE.1  A-SSE.2 | MP3  MP1 | 3  2 |
| 1. Students will determine the factors, x-intercepts, and zeros of a graph and use the Zero-Product Property to solve quadratic equations. | A.2.B.A1 | 3.2 | A-SSE.3a  A-SSE.3b  A-SSE.3c | MP3  MP1 | 2 |

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| ***November/December/January:***  Solving Quadratic Equations ***15 Weeks*** |



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| ***February/March/April: Exponential Functions***  ***12 Weeks*** |

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| **ESSENTIAL MEASURABLE LEARNING OBJECTIVES** | **CROSSWALK TO STANDARDS** | | | | |
| **GLEs/CLEs** | **PS** | **CCSS** | **MATH** | **DOK** |
| 1. **Students will recognize exponential functions represented numerically in tables, graphically, symbolically, or by verbal descriptions.** | **A.1.E.A1**  **A.4.A.A1**  **A.1.C.A1**  **G.4.B.A1**  **A.4.A.A1**  **G.4.B.A1**  **A.1.C.A1**  **A.1.D.A1** | **1.6**  **1.6**  **1.6**  **3.3**  **1.6**  **3.3**  **1.6**  **1.6**  **1.6** | **F-LE.1c**  **F-LE.3**  **F-IF.6**  **F-IF.7e**  **F-IF.9** | **MP8**  **MP8**  **MP8**  **MP3**  **MP8**  **MP3**  **MP8**  **MP8**  **MP8** | **2**  **3**  **3**  **3**  **3**  **3**  **2**  **3**  **2** |
| 1. **Students will solve exponential equations and systems of equations involving exponentials.** | **A.1.C.A1**  **A.2.D.A1**  **A.4.A.A1**  **G.4.B.A1**  **A.1.B.A1**  **A.1.C.A1**  **A.2.A.A1** | **1.6**  **1.6**  **1.6**  **3.3**  **1.6**  **1.6**  **3.3** | **A-REI.10**  **A-REI.11**  **F-LE.2** | **MP8**  **MP8**  **MP8**  **MP3**  **MP8**  **MP8**  **MP3** | **3**  **2**  **3**  **3**  **2**  **3**  **3** |
| 1. **Students will construct and interpret functions in terms of a context.** | **A.1.C.A1**  **A.1.D.A1**  **A.1.E.A1**  **A.4.A.A1**  **G.4.B.A1**  **A.1.B.A1**  **A.2.A.A1**  **A.1.E.A1**  **G.4.B.A1**  **A.4.A.A1** | **1.6**  **1.6**  **1.6**  **1.6**  **3.3**  **1.6**  **3.3**  **1.6**  **3.3**  **1.6** | **F-IF.4**  **F-BF.1a**  **F-BF.3**  **F-LE.5** | **MP8**  **MP8**  **MP8**  **MP8**  **MP3**  **MP8**  **MP3**  **MP8**  **MP3**  **MP8** | **3**  **2**  **2**  **3**  **3**  **2**  **3**  **2**  **3**  **3** |



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| ***May:***  2nd Semester Completion ***2 Weeks*** |

These weeks are used to complete any objectives that have not been covered and to prepare for the semester finals.