**

***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 1A*

*Grade Level: 9-12*

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| ***August/September/October:***  Relationships Between Quantities ***8 Weeks*** |

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| **ESSENTIAL MEASURABLE LEARNING OBJECTIVES** | **CROSSWALK TO STANDARDS** | | | | |
| **CLEs** | **PS**  **(Standards of Mathematical Practice)** | **CCSS** | **MATH** | **DOK**  **(per GLE/CLE)** |
| 1. Students will choose appropriate units of measure to represent context of a problem | M.2.D.A1  M.2.E.A1 | 1.7  1.6 | N-Q.1 | MP8 MP2 | 2 |
| 1. Students will define appropriate quantities for the purpose of descriptive modeling. |  |  | N-Q.2 |  |  |
| 1. Students will select and use units of measure to accurately model a given real world scenario | N.1.C.A1 | 1.10  1.6 | N-Q.3 | MP4  MP8  MP2 | 2 |
| 1. Students will convert units of measure using dimensional analysis | N.3.D.A1  A.2.A.A1  A.2.B.A1 | 1.7  1.6 | N-Q.1 | MP7  MP8  MP2 | 2 |
| 1. Students will apply rules of significant digits and scientific notation |  |  | N-Q.1 | MP7  MP8  MP2 | 2 |
| 1. Students will use precision of initial measurements to determine the level of precision with which answers can be reported | N.3.D.A1 | 3.2 | N-Q.3 | MP1  MP2  MP6 | 3 |
| 1. Students will interpret parts of an expression such as terms, factors, coefficients. | A.2.A.A1 | 3.3 | A-SSE.1a | MP2  MP8  MP3  MP7 | 2 |
| 1. Students will interpret complicated expressions by viewing one or more of their parts as a single entity. | A.2.A.A1 | 3.3 | A-SSE.1b | MP2  MP8  MP3  MP7 | 3 |
| 1. Interpret and apply rules for order of operations | A.2.A.A1 |  | A-SSE.1b | MP2  MP8  MP3  MP7 | 3 |

Multiple Assessments given during the unit.

Unit Assessment given at end of unit.

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| ***November/December/January/February:***  Reasoning with Equations ***20 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 |

Multiple Assessments given during the unit.

Unit Assessment given at end of unit.

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| ***March/April/May:***  Sequences and Their Related Functions ***6 Weeks*** |

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| **ESSENTIAL MEASURABLE LEARNING OBJECTIVES** | **CROSSWALK TO STANDARDS** | | | | |
| **GLEs/CLEs** | **PS** | **CCSS** | **MATH** | **DOK** |
| 1. Students will identify arithmetic and geometric sequences. | A.4.A.A1  A.1.E.A1  A.4.A.A1 | 1.6  1.6  1.6 | F-LE.1b  F-LE.1c | MP8  MP8  MP8  MP1 | 3  2  3 |
| 1. Students will compare sequences and other functions in terms of their domain. | A.1.B.A1 | 1.6 | F-IF.3 | MP8  MP1 | 2 |
| 1. Students will write recursive and explicit functions to model situations. | A.1.B.A1  A.2.A.A1  A.1.B.A1  A.1.C.A1  A.2.A.A1  A.1.B.A1  A.1.C.A1  A.2.A.A1 | 1.6  3.3  1.6  1.6  3.3  1.6  1.6  3.3 | F-BF.1a  F-BF.2  F-LE.2 | MP8  MP3  MP8  MP8  MP3  MP8  MP8  MP3  MP1  MP7 | 2  3  2  3  3  2  3  3 |
| 1. Students will translate between explicit and recursive notation. | A.1.B.A1  A.1.C.A1  A.2.A.A1 | 1.6  1.6  3.3 | F-BF.2 | MP8  MP8  MP3  MP1  MP7 | 2  3  3 |
| 1. Students will interpret the parameters of linear and exponential functions in terms of a context. | A.4.A.A1 | 1.6 | F-LE.5 | MP8  MP1 | 3 |

