**

***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*

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

|  |  |
| --- | --- |
| **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.A1M.2.E.A1 | 1.71.6  | 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 | MP4MP8MP2 | 2 |
| 1. Students will convert units of measure using dimensional analysis
 | N.3.D.A1A.2.A.A1A.2.B.A1 | 1.7 1.6  | N-Q.1 | MP7MP8MP2 | 2 |
| 1. Students will apply rules of significant digits and scientific notation
 |  |  | N-Q.1 | MP7MP8MP2 | 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 | MP1MP2MP6 | 3 |
| 1. Students will interpret parts of an expression such as terms, factors, coefficients.
 | A.2.A.A1 | 3.3 | A-SSE.1a | MP2MP8MP3MP7 | 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 | MP2MP8MP3MP7 |  3 |
| 1. Interpret and apply rules for order of operations
 | A.2.A.A1 |  | A-SSE.1b | MP2MP8MP3MP7 |  3 |

Multiple Assessments given during the unit.

Unit Assessment given at end of unit.

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

|  |  |
| --- | --- |
| **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.A1A.3.A.A1G.4.B.A1  | 3.3 1.6 3.3 | A-CED.2 | MP3MP8MP3 | 323 |
| 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.A1A.3.A.A1G.4.B.A1 | 1.6 1.7 1.8  | A-CED.3 | MP8MP3MP6MP7MP6 | 223 |
| 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.A1A.2.C.A1 | 3.23.2 | A-REI.1 | MP1MP1 | 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.

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

|  |  |
| --- | --- |
| **ESSENTIAL MEASURABLE LEARNING OBJECTIVES**  | **CROSSWALK TO STANDARDS** |
| **GLEs/CLEs** | **PS** | **CCSS** | **MATH** | **DOK** |
| 1. Students will identify arithmetic and geometric sequences.
 | A.4.A.A1A.1.E.A1A.4.A.A1 | 1.61.61.6 | F-LE.1bF-LE.1c | MP8MP8MP8MP1 | 323 |
| 1. Students will compare sequences and other functions in terms of their domain.
 | A.1.B.A1 | 1.6 | F-IF.3 | MP8MP1 | 2 |
| 1. Students will write recursive and explicit functions to model situations.
 | A.1.B.A1A.2.A.A1A.1.B.A1A.1.C.A1A.2.A.A1A.1.B.A1A.1.C.A1A.2.A.A1 | 1.63.31.61.63.31.61.63.3 | F-BF.1aF-BF.2F-LE.2 | MP8MP3MP8MP8MP3MP8MP8MP3MP1MP7 | 23233233 |
| 1. Students will translate between explicit and recursive notation.
 | A.1.B.A1A.1.C.A1A.2.A.A1 | 1.61.63.3 | F-BF.2 | MP8MP8MP3MP1MP7 | 233 |
| 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 | MP8MP1 | 3 |

