

Dear Parents or Guardian,

I would like to welcome you and your student to Algebra 1. I believe that your student will succeed in this class and that communication between you and I is one of the many ways to ensure this success. Please read the following information and sign at the bottom. Please fill in the comment section if there is anything I need to know to help make this year easier for your student.

Curriculum: New Caney ISD adopted textbooks focusing on problem solving and real-life situations. Each student will be given a textbook to keep at home and a password / username to access the online textbook. I will have a class set for the students to use at school. In compliance with TEA, middle school students will have to pass the 8<sup>th</sup> grade Math and Reading portions of TAKS in order to be promoted to high school. In addition, students completing Algebra 1 and the EOC exam will receive high school credit.

Agenda: The students are required to record daily activities and homework in their student handbook. The grading policies are in the agenda.

Homework: Math homework will be given four days a week. I sometimes assign homework on Fridays when absolutely necessary. All homework is due at the beginning of class.

Late Work: In compliance with NCISD Grading Procedures, no late work will be accepted and a zero will be recorded for the grade.

Make-Up Work: If your student has been absent from school, it is his/ her responsibility to get the assignments he or she missed. Your student has one day of make-up time for each day absent.

Tutoring: Tuesday 2:30 – 3:00 pm. If there is a conflict with this time, please let me know so that we can make other arrangements. Tutoring is also available online at <http://my.hrw.com> under the video tab. User Name: eagles29  
Password: eagles

Materials: Refer to the 8<sup>th</sup> grade supply list. The TI-83 calculator is recommended for this class. Also, please be aware that all work is to be completed in **pencil** or points will be deducted.

I look forward to working with you and your student. My conference period is 1:38 – 2:30 p.m. Please contact me about any concerns you have at Keefer Crossing 281-577-8840 or email me at [tclark3@newcaneyisd.org](mailto:tclark3@newcaneyisd.org).

Thank You,  
Tonya Clark  
Algebra 1

Student Signature: \_\_\_\_\_ E-mail: \_\_\_\_\_

Parent / Guardian Signature: \_\_\_\_\_ Phone#: \_\_\_\_\_

Comments:

# Algebra 1

## Chapter 1: Foundations of Algebra

- Variables and expressions
- Real numbers
- Powers and exponents
- Square roots
- Order of operations
- Properties
- Introduction to functions

## Chapter 2: Equations and formulas

- Solve 1&2 step equations
- Solve multi-step equations
- Rates, ratios & proportions
- Applications of proportions
- Percents
- Applications of percents
- Percent of increase/decrease

## Chapter 3: Inequalities

- Graphing & writing inequalities
- Solve 1&2- step inequalities
- Solve multi-step inequalities

## Chapter 4: Functions

- Graphing relations
- Relations and functions
- Writing functions
- Graphing functions
- Scatter plots
- Arithmetic sequences

## Chapter 5: Linear Functions

- Identifying linear functions
- Intercepts
- Rate of change and slope
- Slope formula
- Direct variation
- Slope-intercept form
- Transforming linear functions

## Chapter 6: Systems of Equations and Inequalities

- Solve by graphing
- Solve by substitution
- Solve by elimination
- Solve special systems
- Solve linear inequalities

## Chapter 7: Exponents and Polynomials

- Integer exponent
- Scientific notation
- Exponents
- Polynomials
- Special products

## Chapter 8: Factoring Polynomials

- Factoring by GCF
- Factoring by  $x^2 + bx + c$
- Factoring by  $ax^2 + bx + c$
- Factoring special products
- Choosing a factoring method

## Chapter 9: Quadratic Functions and Equations

- Identify quadratic functions
- Graphing quadratic functions
- Transforming quadratic functions
- Solving quadratic equations

## Chapter 10: Data Analysis and Probability

- Organizing & displaying data
- Frequency & histograms
- Data distributions
- Misleading graphs/statistics
- Experimental probability
- Theoretical probability
- Independent & dependent events

## Chapter 11: Exponential & Radical Functions

- Geometric sequences
- Exponential functions
- Exponential growth & decay
- Linear, quadratic, & exponential models
- Radical expressions
- Solve radical equations

## Chapter 12: Rational functions & equations

- Inverse variation
- Simplifying rational expressions
- Solving rational equations