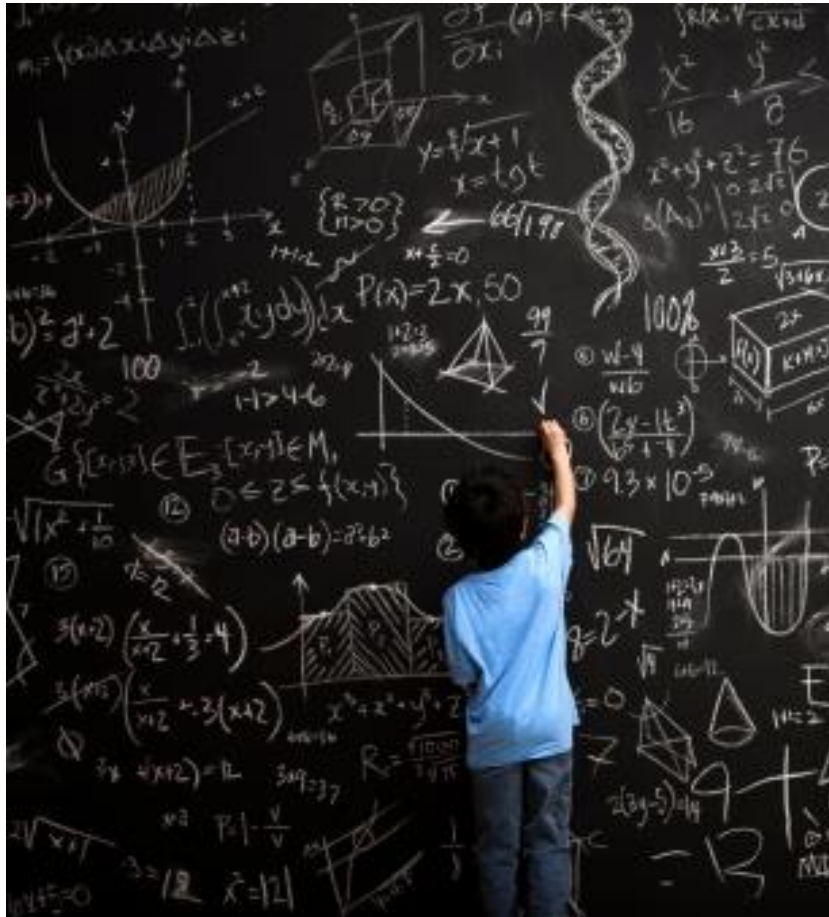Name: _____

Algebra 2
(8/23-9/21)

"**Do not worry about your difficulties in Mathematics. I can assure you mine are still greater.**" **– Albert Einstein**

Essential understanding

Continuing from Algebra I, you will discover techniques to easily solve seemingly complex and difficult equations. We will review many of the concepts previously seen and refine them to account for the nuances present in society. In doing so, you will begin to understand the complexities of daily life and the extent in which Mathematics can both describe the present and predict the future.

Overview:

For this first unit, we will reacquaint ourselves with concepts introduced in Algebra 1. Having spent a year on Geometric formulation and proof writing, it is a good idea to cover the basics so that we can switch gears and refamiliarize ourselves with the technical side of mathematics. Because this unit is a review, we will cover concepts quickly. Please come see me if you get stuck sooner rather than later!

General Guidelines:

Lessons:

- Two per week
- Meet in front of the whiteboard
- Three Before Me: Ask three peers before me if you have a question
- If you're having trouble with concepts, attend tutoring (4-4:30pm M/T/Th/F Rm 3)

Individual Work:

- 34% of total grade
- Problem sets due the following class meeting at the beginning of class (silver basket)
- Must be submitted on loose paper

Group Work:

- 33% of total grade
- Includes any assignment labeled "Group Activity" or "Group Assignment"
- Includes week-long projects or final projects

Quizzes/Assessments:

- 33% of total grade
- Must be completed on scheduled date
- Resubmissions allowed for half of the remaining credit OR retakes allowed during tutoring hours
- One side of one sheet of 8.5" x 11" paper allowed for notes, formulas, or any other useful information

Late Work:

- Late individual work accepted **at most** two days late (10% deducted each day/weekend)
- Make up assessments only allowed with an **excused absence**; retakes done during tutoring hours
- Extensions granted after signing petition form AND emailing your parents (cc me in the email)

Materials:

Math Journal:

- Grid paper (spiral ring and composition are both acceptable)
- Used for notes during lessons and activities

Three Prong Folder/Binder:

- Used for extra papers/worksheets handed out during class
- HOLD ONTO YOUR ASSESSMENTS!

Calculators:

- Allowed during class
- NOT allowed during assessments

Lessons:

Content Lesson Themes

____ Number Line, Unit Analysis   ____ Linear Equations and Functions

____ Evaluate/Simplify Expressions   ____ Solving Absolute Value Equations

Logistical Lessons

____ Study Guides   ____ IXL

____ Vocabulary Options   ____ Formatting/Submitting Problem Sets

____ Google Classroom

Guiding question 1:

What is Mathematics?

Assignments	Due Date (EoC)
Week 1/2 (8/23-8/31): ____ *1)* Read the first two pages of the study guide and mark it up. Be sure to highlight/ underline information you find important, as well as any parts which are confusing. ____ *2) Individual Work- Cultural Artifacts***:** Mathematics is one of many skills that we use in our daily lives. Without realizing it, you are intuitively calculating amazing and complex situations at any given moment. Whether it's estimating the strength and direction you throw a basketball to make a three pointer or the ways you move your body to the rhythm of a beat, you are living mathematics. For your first project, **you will bring in an artifact which represents your culture and/or passions. In addition, you will write a paragraph explaining what object you've brought, how it personally relates to you, and how mathematics relates to it.**	 **Mon 8/27** **(5,6)** **Tues 8/28** **(7,8)**

_____ 3) **_Group Activity – Coordinating Hobbies/Passions:_** Using the gallery walk as inspiration, agree on two activities to use as the x and y axis of a coordinate plane. Convert your interest level of the two into ordered pairs (x, y) and graph on the plane!	**Mon 8/27** **(5,6)** **Tues 8/28** **(7,8)**
_____ 4) **_Group Activity – Magic Squares:_** Create three 3x3 magic squares with your partners and submit images of them to google classroom (include the name of you and your group members). After, see if you can create a 4x4 (or even 5x5) magic square.	**Thurs 8/30** **(5,6)** **Fri 8/31** **(7,8)**
Week 3/4 (9/4-9/7): _____ 5) Vocabulary: **algebra, integer, rational number, irrational number, whole number, linear equation, absolute value, variable** (do one of the below). a. Complete a vocabulary graphic organizer, making sure to include b. Create a mind-map with connections, a story, or a drawing with captions that shows the connections between the above terms. c. Create vocabulary cards of the above terms. Be sure to include an example for each. _____ 6) **_Problem Sets:_** These can be found in the textbook (unless otherwise stated!) _____ a. **1.1:** p.6 #'s 3-8 all, 25-45 odds _____ 7) **_IXL:_** Log into your account and take the diagnostic test.	**Mon 9/10** **(5,6)** **Tues 9/11** **(7,8)** **Sun 9/9**

Week 5 (9/10-9/14):
 	
_____ 8) **_Problem Sets:_** These can be found in the textbook (unless otherwise stated!)
 	
    _____ a. **1.2/1.3:** p.14 #'s 4, 7, 10, 13, 16, 19, 22, 25, 28, 29, 35
                   p.21 #'s 3-27 odds, 33, 35, 52
 	
    _____ b. **1.4:** p.30 #'s 7-17 odds, 18, 19, 20
 	
_____ 9) **_IXL:_** Complete 20 questions **OR** submit an hour of practice **OR** make progress in at least five skills throughout the week.
	Sun 9/16

Week 6 (9/17-9/21):
 	
_____ 10) **_Problem Sets:_** These can be found in the textbook (unless otherwise stated!)
 	
    _____ a. Solving/Graphing Inequalities Worksheet
 	
    _____ b. **1.7:** p.55 #'s 9, 11, 13, 15, 21, 25, 28
_____ 11) **_IXL:_** Complete 20 questions **OR** submit an hour of practice **OR** make progress in at least five skills throughout the week.
	Sun 9/23

_____ 20) **_ASSESSMENT:_** **Expressions/Equations/Inequalities**

(Thurs 9/20 or Fri 9/21)