

# Pre-Algebra Course Syllabus

Agnes Loving aloving@paparts.net Phone: (505) 830-3128

Google classroom code: gc73tidj Room: 25

#### **Course Description:**

This course will build a foundation of algebraic concepts using technology, manipulatives, problem solving, and cooperative learning. Concepts include algebraic expressions, linear equations, factoring, inequalities, geometry, statistics, and graphing. Problem solving, reasoning, estimation, and connections between math and everyday applications will be emphasized throughout Pre-Algebra. This course is designed to prepare students for Algebra I. Competencies are required to be taught. The competencies combine the content strands: patterns/algebraic thinking, data analysis/prediction, measurement, geometric concepts, and number sense, and the process strands: problem solving/reasoning, estimating, and making connections/applications. The competencies may relate to one, many, or all of the mathematics curriculum strands and may be combined and taught with other competencies throughout the school year.

#### **Topics**

**Topics for Semester-1:** 

Integers
Rational Numbers
Exponents
Scientific Notations
Square Roots and Cube roots
Rational and Irrational Number
Proportions
Percents
Unit of Measurements
Expressions
Equivalent Expressions
One Variables Expressions

### **Objectives**

#### In pre-algebra:

- 1. Students will be able to identify, compare, and perform operations with integers, demonstrating mastery through problem-solving and application.
- 2. Students will be able to identify, compare, and perform operations with rational numbers.
- 3. Students will be able to evaluate and simplify expressions involving exponents, including using the laws of exponents.
- 4. Students will be able to convert numbers into scientific notation and solve problems using scientific notation.
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- 6. Students will be able to distinguish between rational and irrational numbers, provide examples of each, and classify numbers correctly.
- 7. Students will be able to identify, set up, and solve proportions in real-world contexts.
- 8. Students will be able to calculate percentages, convert between fractions, decimals, and percentages, and apply their understanding of percents to real-world scenarios.
- 9. Students will be able to convert between different units of measurement and apply these conversions in real-world contexts.
- 10. Students will be able to evaluate and simplify algebraic expressions using the order of operations.
- 11. Students will be able to identify, create, and simplify equivalent expressions using algebraic properties and operations.
- 12. Students will be able to simplify and evaluate one-variable expressions.

### Webb's Depth of Knowledge

#### DOK 1: Recall and Reproduction

Students will learn various theorems in pre-algebra. The students will be working on their practices, quizzes/tests, bellringers to recall their knowledge and small projects to apply their knowledge and understanding measurements in Geometry.

### DOK 2: Application of Skills and Concepts

The students will be working on small projects, applying the knowledge they have learned, doing measurements and doing some research learning the contents in real life applications.

#### DOK 3: Strategic Thinking

Students will learn many theorems to solve problems. The students will learn that to solve problems, using critical thinking, they can use a different method to solve the same problems. The students will learn various ways of solving problems.

### DOK 4: Extended Thinking

The students will learn to create, interpret and use their knowledge to solve real live situation related to measurement of angles, lengths in various shapes using various theorems to solve real world situations.

### **Supplies**

Chromebook (provided for in class used), notes book, pencil, calculator, ruler, protractor and compass.

### **Student's Expectations**

- 1. Stay focused.
- 2. Signal for attention.
- 3. Be present.
- 4. Value and grace to others.
- 5. Come prepared and start on time.
- 6. Complete assignments.
- 7. Monitor your own progress.
- 8. Ask for help if needed.
- 9. No cell phones.

### **Teacher's Expectations**

- 1. Treat and grade students fairly.
- 2. Teach and review the materials.
- 3. Update student's grade periodically, at least once a week.
- 4. Provide support to all students.
- 5. Contact parents/guardians as necessary.
- 6. Inform and request the school if the student needs some more assistance.

### **Grading Policy**

The assignment in IXL is due the next day after the lesson is delivered. If the student is absent on that day, she/he must turn in on the first day she/he comes back to school. All projects due as designated date. All late assignments will be deducted 15%. For all late assignments, students are required to notify me via email when she/he completed the assignments, if not, the grade/s may not be entered or be updated. Periodically the students also will work on some projects as a part of their grade

#### **Test Correction:**

. Students who earn a quiz/test score less than 60% are encouraged to do a test correction.

- . Both the original test scores and the test correction scores will be counted and have the same weight.
- . Students will have one chance to do a test correction for every quiz/test.
- . The students will re-do the wrong problems only and the test correction will be done at home.
- . Students can earn up to 75% on their test correction when they meet the expectations.
- . There will be no test correction on their final".

Students are expected to earn 60% or higher on tests. If they score below that they must attend targeted assistance to re-learn, practice, and re-test in that area.

Parents/guardians/students are encouraged to monitor the student's grade periodically.

## The weight in each quarter grade:

IXL-Practices, Bellringers/Exit-tickets: 40%

Quizzes: 25% Tests: 15%

Small projects, other skills practices: 10%

Participation: 10%

### The weight in each semester grade:

**Quarter 1: 40% Quarter 2: 40%** 

Final exam or EOC: 20%

### Restroom and dismissal policy

### **Restroom Policy:**

- 1. One at a time with a pass. Students are required to sign the sign-out sheet.
- 2. The first 5 minutes after the class starts and 5 minutes before the class ends, no student is allowed to go to the restroom. Within 5 minutes the student should be back in class, if not, the office will be called, after 3 times happened, the parent/guardian will be called.
- 3. No one leaves the classroom during the lesson/instruction.

### **Dismissal Policy:**

The bell will ring when the class ends. Students will leave the classroom after the bell rings and after I dismiss the class.

### Tardy and absences

When the student comes late and enters the class up to the first 15 minutes, she/he will be marked tardy, after the first 15 minutes, she/he will be marked absent.

Otherwise, the student should have a pass from the front office or school staff.

I have read the classroom procedures and students' expectations in Mrs. Loving's class.  I understand that if I fail to comply with these procedures and expectations, I will receive consequences such as phone calls home, office referrals or whatever action is deemed appropriate.	
Student name:	Period:
Student's signature:	Date:
Parent/guardian name:	Phone number:
Parent/guardian signature:	Date: