

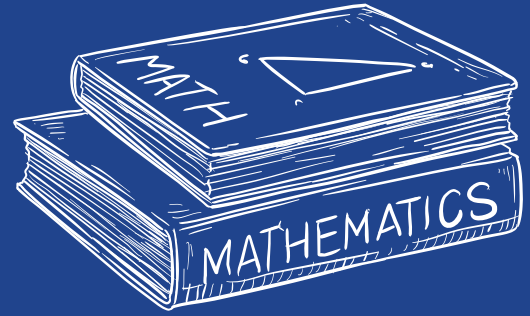
8th grade Math Syllabus

Northwest Elementary School

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Course Description

Students will build on their knowledge of Rational Numbers from 7th grade in order to study Rational and Irrational Number problems. Other topics of study include Understanding Rigid Transformations, Angle Relationships, Graphing Proportional Relationships and Linear Equations, Defining Slope, Solving Linear Equations in One and Two Variables, Understanding Functions, Applying exponent properties, Working with Scientific Notations, Finding Square and Cube Roots, Understanding and Applying the Pythagorean Theorem.

Supplies			
3 inch Binder	Plug-in Headphones	Highlighters (At least 4 colors)	1 pack of Sheet Protectors
5 tab Binder Dividers	Loose Leaf Paper	Pencils	

Course Grading



Grading Scale

90% - 100% = A
80% - 89% = B
70% - 79% = C
60% - 69% = D
59% and under = F

Grading and Types of Assignments

- 1/3 or 33.3% of grade:
 - Quizzes and Tests - iReady and Mastery Connect quizzes, Benchmark Mastery Connect tests.
- 1/3 or 33.3% of grade:
 - Classwork and Homework - every day classwork, class participation, and homework. Homework will only be given if the student or class **did not** finish it during class time. They will be given enough time in class.
- 1/3 or 33.3% of grade:
 - iReady - iReady MyPath curriculum that is personalized to the student and their abilities. Students should get 45 minutes per week in iReady MyPath.

Inclusion	Attendance	School Rules
Our class will be one where everyone belongs and everyone learns. This means that all of our interactions will be respectful of diversity: culture, nationality, race, ethnicity, disability, economic status, sex, and religion. Our learning environment will be one of trust and safety. I encourage you to get to know and learn from each other. We are all different, and these differences will make this class better.	We will follow the school attendance policy. If you miss class, it is your responsibility to find out what you missed.	1. Be Respectful 2. Be Responsible 3. Be Safe

Conduct & Discipline Policy

Students are expected to behave in class and online in a polite, respectful manner that does not violate the rights of others. In addition to being respectful of others, students should be on time, on task, and prepared to learn every day. If students are not following the school rules, the following are consequences that students will face:

- **LEVEL 0:** Redirection / Reminder of rules
- **LEVEL 1:** Warning - Students will fill out the online "Student Discipline Form" that describes the infraction(s), how the student's action affect others, and how the student will improve their actions.
- **LEVEL 2:** Conference with student - A reteaching time, an opportunity for students to discuss why this behavior is happening, and a chance to change the problem behavior. Student will also fill out the online "Student Discipline Form."
- **LEVEL 3:** Loss of Privileges - An in-class time out, partial / full loss of recess (students will walk during recess), silent lunch, loss of computer game time, etc. Student will also fill out the online "Student Discipline Form."
- **LEVEL 4:** Parent Contact - Through a phone call from school (please make sure to have a working phone number on file with the office) Student will also fill out the online "Student Discipline Form."
- **LEVEL 5:** Office Referral - A plan for improvement developed between the principal, restorative teacher, guidance counselor, teachers, student, and/or parents.

Classroom Procedures & Expectations

Entering Class 	Class Materials 
• If the classroom door is closed, please wait in the hall until I open it. • Students will be quiet going through the computer lab. • Upon entering, go to seat, follow instructions on board or wait quietly until given instructions.	• Follow Instructions on board: Items Needed, when requested in class. • Always get your Math Binder, Computer and a pencil. • You may have an independent reading book with you.
 Cell Phones	Restroom Breaks
• State law states that you cannot have a cell phone on and/or out in class. • Put cell phones up and make sure that it is off. • When students are found to have a cell phone, the student will give it to the teacher or staff member that requests it. ◦ First violation: Phone taken to office, write up, get the phone back at end of day. ◦ Second violation: Phone taken to office, write up, parent will have to pick up in 7 days. ◦ Third violation: Phone taken to office, write up, parent will have to pick up in 30 days.	• Restroom breaks will be taken as a whole class. ◦ Restroom breaks will be taken daily in science and social studies class. ◦ No horseplay at the restrooms or hall. ◦ Everyone will be quiet in the hallway as not to disturb other classes. ◦ The restroom will be checked after everyone has finished by the teacher. • Individual restroom breaks will be on an emergency or doctor ordered times only. ◦ Students will sign out and in on the sign out sheet. ◦ Students will also take the hall pass and return it.
Food / Drink / Gum	Leaving Class
• You are allowed to have water / sports drink in class. • Your water / sports drink must have a lid that does not spill. • No food is allowed in class unless it is breakfast because you were late or you received candy from the teacher. • You may not have gum. 	• You will be given three minutes to pack up at the end of class. • Do not pack up early or gather by the door. • If you must stand, stand by your chair. • You will be dismissed by the teacher.

Every procedure
has a purpose: to
help us learn better!

8th grade Math Schedule

1st 9 Weeks

- Unit 1: Geometric Figures: Rigid Transformations and Congruence
 - Understand rigid transformations and their properties
 - Work with single rigid transformations in the coordinate plane
 - Work with sequences of transformations and congruence
- Unit 2: Geometric Figures: Transformations, Similarity, and Angle Relationships
 - Understand dilations and similarity
 - Perform and describe transformations involving dilations
 - Describe angle relationships
 - Describe angle relationships in triangles
- Unit 3: Linear Relationships: Slope, Linear Equations, and Systems
 - Graph proportional relationships and define slope
 - Derive and graph linear equations of the form $y = mx + b$
 - Solve linear equations in one variable
 - Determine the number of solutions to one-variable equations
 - Understand systems of linear equations algebraically

2nd 9 Weeks

- Unit 4: Functions: Linear and Nonlinear Relationships
 - Understand functions
 - Use functions to model linear relationships
 - Compare different representations of functions
 - Analyze functional relationships qualitatively
- Unit 5: Integer Exponents: Properties and Scientific Notation
 - Apply exponent properties for positive integer exponents
 - Using properties of operations to generate equivalent expressions
 - Apply exponent properties for all integer exponents
 - Express numbers using integer powers of 10
 - Work with scientific notation

3rd 9 Weeks

- Unit 6: Real Numbers: Rational Numbers, Irrational Numbers, and the Pythagorean Theorem
 - Find square roots and cube roots to solve problems
 - Express rational numbers as fractions and decimals
 - Find rational approximations of irrational numbers
 - Understand the Pythagorean Theorem and its converse
 - Apply the Pythagorean Theorem
 - Solve problems with volumes of cylinders, cones, and spheres
- Unit 7: Statistics: Two-Variable Data and Fitting a Linear Model
 - Analyze scatter plots and fit a linear model to data
 - Write and analyze an equation for fitting a linear model to data

4th 9 Weeks

- TN Ready Review (TCAP)
- TN Ready Test (TCAP)
- After testing, students will participate in STEM related lessons.

Field Trips

We are planning on taking 2 reward trips this year, one in December and one in May. These field trips will be based on behavior, school attendance and work completion. Students with 1 office referral, or 5 unexcused absences will not be eligible to attend. This will reset in January. All missing work must be completed for the student to be eligible to attend either field trip. We will send out permission slips and money due closer to the field trips. Teachers and/or administration have the final say in students being able to attend.