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Welcome to 8th Grade Math

2017-2018 Course Outline

Mr. Willimann

**Course Description**

The main objectives that you will be working towards mastery this school year fall inside the topics listed below. These ideas and topics will be used to guide my instruction in this course. In 8th Grade Math, you will be building upon your prior mathematical knowledge. The topics we will discuss this year include:

**The Number System**

Working with rational numbers; writing, evaluating, and simplifying exponents; properties of exponents; perfect squares and square roots; using scientific notation.

**Expressions and Equations**

Solving two and multi-step equations; graphing linear relationships; slope, intercept, writing equation for linear relationship given points; solving systems of equations

**Functions**

Representing linear relationships in graphs, tables, equations; comparing functions; constructing functions; determining whether a function is linear or nonlinear; quadratic functions.

**Geometry**

Intersecting lines, polygons, and angles; Pythagorean Theorem and distance on coordinate plane; transformations - translations, reflections, rotations, and dilations; congruent and similar figures, properties of similar polygons; area and perimeter of similar figures; surface area and volume of cylinders and cones, volume of spheres.

**Scatter Plots and Data Analysis**

Lines of best fit; linear or nonlinear representations; measures of variation; analyzing data distributions.

**Materials Needed Daily**

* Pencils and pens
* Paper – loose leaf or notebook
* 2 inch 3 ring binder or folder
* Calculator – capable of fractions

**Classroom Expectations**

* Attend class
	+ If you’re absent, it is your responsibility to find and complete what you missed
		- Notes from the classwork will be posted on my website
* Engage in classwork and homework.
	+ Keep up with assigned homework.
	+ Participate in class/group discussions and activities
* Seek extra help as soon as difficulties arise.

**Behavior Expectations**

* Follow teacher directions
* Respect the learning environment
* Respect others’ thoughts, feelings, and space

If you choose not to follow the expectations, one or more of the following may occur:

-Conversation with the teacher -Talking/Meeting with Parent/Guardian -Office Referral

**Grading**

Your scores on homework, target checks, quizzes, and tests will be used to calculate your final grade. These scores will be weighted, which means that each category will be worth a percentage of your final grade. Lumen will use these percentages when calculating your grade.

 **Category** **Percentage**

Tests 45%

Quizzes 30%

Target Checks 15%

Homework 10%

**Grading Scale**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A** | 95-100% |  | **C** | 73-76% |
|  **A-** | 92-94% |  |  **C-** | 70-72% |
|  **B+** | 87-91% |  | **D+** | 67-69% |
|  **B** | 83-86% |  | **D** | 63-66% |
| **B-** | 80-82% |  | **D-** | 60-62% |
|  **C+** | 77-79% |  | **F** | 0-59% |

**Classwork and Homework**

Be engaged in your group and in class discussions.  This will help you through the classwork and homework.  Homework assignments will be graded for completion, but may be collected at different times throughout the unit and graded for accuracy. Each homework assignment that is graded by completion is worth 4 points. If you complete the homework to level expected then you will receive all 4 points (100%). If homework isn’t completely finished or did not meet expectations then you will earn either 3 (75%), 2 (50%), or 1 point (25%). If you did not do any homework at all then you will receive a zero on that assignment. I expect students to show work and justify answers on assignments. **If you do not show work, you will not receive full credit.**

**Target Checks**

 Target Checks are quick assessments that are based on a few days of information. They are usually printed on ½ sheets based on what the topic(s) from previous days of classwork and homework. Your grade on these checks represent a snapshot of your understanding of an objective. You will be able to keep any graded target check. They will be useful when preparing for larger assessments.

**Tests and Quizzes**

Quizzes check your understanding of a larger amount of material. Quizzes are generally given at the halfway point and towards the end of a unit. Tests are cumulative exams that check your understanding of the topics and ideas that you have learned in the entire unit. The questions on the test will range in difficulty. You can use your classwork, homework, and graded assessments to help you study.

\* If you’re struggling, **see me for help before taking the quiz or test**. You need to put yourself in the best position to succeed and I will help support you.

**Late Work:**

 All late work must be completed after school with the assigned Zero Tolerance teacher. I will collect your incomplete homework and give it to the teacher responsible for supervising Zero Tolerance. Late work will not receive full credit, but students can earn back points to improve the grade they originally received on the assignment.

**Absent Work**: The day you return to school after an absence:

Classwork – A filled out copy of the notes will be available upon request.

Homework – This will be written on the classwork. Complete missed homework by the next day.

 Target Check/Quiz/Test – See Mr. Willimann to schedule a time outside of class to make it up.

**Academic Honesty**

It is important that anything you put your name on is your own work. If you are caught copying off another student’s homework or assessment, I will do one or more of the following:

-contact parents/guardians -have a discussion with you -write an office referral -deduct points from score

**Website**

I have a math website where you and your parents can stay up to date on what is happening in math class. On the website you’ll be able to find teacher notes, answer keys, classroom activities, assignments, and when assessments are. **The website will be a great resource to help you be successful in class.**

 To Access the website, do the following:

1. Go to shamrocksms.weebly.com
2. Click on 8th Grade Math

**Communication**

 Students, if you ever have any concerns, please advocate for yourself and come speak with me. I am always willing to work with students that want to do better.

If your parent(s)/guardian(s) ever have questions about your performance in math class or have any other questions/comments, please have them communicate with me. The best way to reach me is through e-mail at jwillimann@newhavenschools.us.

I will be e-mailing information throughout the school year to parents/guardians. They will usually be general announcements about upcoming events in your class.

I will be updating my math website, which you can look at to see what is happening in class. We will be posting homework assignments on this website. Also, there will be announcements about upcoming quizzes and tests.

I am looking forward to this school year and I’m excited to have you in my class!!