

Course Description

A. Course Scope:

This one-year course is designed to focus on three critical areas: 1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; 2) grasping the concept of a function and using functions to describe quantitative relationships; and 3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. Instructional practices incorporate integration of diversity awareness, including appreciation of all cultures and their important contributions to society. The use of manipulatives, mathematical tools, and technology, including calculators and computer software, is an integral part of this course. This course fulfills the mathematics requirement for eighth-grade students.

B. Course Goals:

1. To develop the Standards for Mathematical Practice [NVACS]

- i. Make sense of problems and persevere in solving them.
- ii. Reason abstractly and quantitatively.
- iii. Construct viable arguments and critique the reasoning of others.
- iv. Model with mathematics.
- v. Use appropriate tools strategically.
- vi. Attend to precision.
- vii. Look for and make use of structure.
- viii. Look for and express regularity in repeated reasoning

2. The Number System

Know that there are numbers that are not rational, and approximate them by rational numbers.

3. Expressions and Equations

- i. Work with radicals and integer exponents.
- ii. Understand the connections between proportional relationships, lines, and linear equations.
- iii. Analyze and solve linear equations and pairs of simultaneous linear equations.

4. Functions

- i. Define, evaluate, and compare functions.
- ii. Use functions to model relationships between quantities.

5. Geometry

- i. Understand congruence and similarity using physical models, transparencies, or geometry software.
- ii. Understand and apply the Pythagorean Theorem.
- iii. Solve real-world and mathematical problems involving volume of cylinders, cones and spheres

6. Statistics and Probability

Investigate patterns of association in bivariate data.

C. Course content and time schedule (sequential)

Quarter 1	Quarter 2
Writing expressions Solving Equations Rational and Irrational Numbers Powers and Roots	Properties of Exponents Operations of Scientific Notation Exploring Slope and Slope-Intercept From Proportional Relationships Introduction to Functions
Quarter 3	Quarter 4
Graphing Systems of Linear Equations Solving Systems of Linear Equations Algebraically Real Numbers Distance to Midpoint Formula Applying the Pythagorean Theorem Converse of the Pythagorean Theorem	Surface Area Volume of Solids Scatter Plots and Association Data Analysis and Probability Angle Relationships and Transformations

D. Course Activities

Tests/Quizzes

Classroom assignments

Homework Technology Based Projects

Notetaking

Enrichment activities/projects

Prime Time (aka “Daily Math”)

E. Curricular Programs

Glencoe Math

The math staff at Leavitt Middle School will implement Glencoe math. This program follows the Common Core Standards, building on prior knowledge and guiding students through concepts with coherent progression. Each standard is an extension of what has been learned before. Google Classroom will also be an essential component of your child’s math program. Assignments, lessons, and extensions will be available for you and your child to access at home via computer, iPad, etc.

ALEKS

Assessment and LEarning in Knowledge Spaces is a Web-based, artificially intelligent assessment and learning system. ALEKS uses adaptive questioning to quickly and accurately determine exactly what a student knows and does not know in a course. Additionally, ALEKS then instructs the student on the topics he/she is most ready to learn. As a student works through a course, ALEKS periodically reassesses the student to ensure that topics learned are also retained.

Recommended Supplies

Binder (1 inch to 1 ½ inch)

Notebook

Loose Leaf Paper

Pencils and Pens

Divider Sheets

Ruler

F. Evaluation

Students will be evaluated based on the following criteria:

Quarter Grades:

Summative Assessments: Tests/Quizzes/Projects – 80%

Formative Assessments: Classwork/Homework/Notes/Projects – 20%

Semester Grades

Will be based on the quarter grades and a semester exam

Quarters 1 & 2	40% each	Semester Exam 1	20%
Quarters 3 & 4	40% each	Semester Exam 2	20%

****Semester exams will not be administered early. Students who are absent may make-up their exams on the district approved make-up day.**

Grading

A-90% and above B-80%-89% C-70%-79% D-60%-69% F-Below 60%

Citizenship/behavior expectations

Citizenship is taken very seriously here at Leavitt Middle School. Teachers expect the very best from their students every day. Students are expected to bring supplies to class, pay attention, stay on task, talk when appropriate, be respectful to all teachers and students, avoid nuisance items, such as cell phones and toys, and not chew gum or eat in class. Students who cannot work within these expectations will have points deducted from their citizenship grades. Other actions which disrupt the learning environment of the classroom or other students will also be documented and points will be lost. Below is the scale for citizenship:

- 0-2 – O-Outstanding
- 3-5 – S- Satisfactory
- 6-8 – N-Needs Improvement
- 9 or more – Unsatisfactory – U

Homework Policy

The purpose of homework is to reinforce the skills and concepts that are taught in class. **Homework will be assigned Monday through Thursday.** It will consist of unfinished classwork, reviews, and practice activities. Unexcused or missing assignment will result in a reduced grade. Please note that this may adversely impact the student's grade.

Make-up Work

Make-up work is the student's responsibility. In the event of an excused absence, the student will be allowed to make-up any work that was missed. The makeup work must be returned to the teacher by the specified due date if it is to be acknowledged. Students shall be allowed a minimum of three (3) days to complete makeup work.

If a student does not complete any assignment (for reasons other than an absence), they will be assigned a make-up work detention the following school day from 3:30 to 4:25 EVEN if they turn the assignment in the next school day.

Academic Support

Academic support is available to all students. It is expected that any student whose grade falls below a 72% or is having difficulty with the algebraic concepts attend the academic support sessions. These sessions will be held before and after school. Additionally, Math Lab will be held on Wednesdays from 3:30 pm to 4:25 pm.

G. School-Wide Rules, Policies, and Procedures

1. **School-Wide Rules**

- a. Follow directions quickly.
- b. Raise your hand for permission to speak.
- c. Raise your hand for permission to leave your seat
- d. Make SMART Choices: Kindness, Leadership, Courage, Invincible Grit, Creativity
- e. Work hard to do your best for your teachers and parents at all times.
- f. Keep your eyes on the target. ♦

2. **TARDY POLICY – Progressive Steps**

- a. 1st Tardy – Warning & Parent Phone Contact
- b. 2nd Tardy – Warning & Parent Phone Contact
- c. 3rd Tardy – Non-TRS RPC
- d. 4th Tardy – After School Detention
- e. 5th Tardy – In-House Suspension (IHS)
- f. 6th Tardy – Required Parent Conference – RPC/Tardy Contract
- g. 7th Tardy – IHS/parent and student meet with the principal

3. **BEHAVIOR- Progressive Discipline**

- a. 1st Incident – Verbal warning
- b. 2nd Incident - Parent contact by teacher
- c. 3rd Incident – Written contact to parent
- d. 4th Incident – Counselor referral
- e. 5th Incident – Deans' referral

4. Utilizing technology to learn – At Leavitt, we want to encourage the daily use of technology in and out of the classroom to further enhance the educational experience. As such, Leavitt will be providing students with individual devices in all grades to utilize in class and at home. Students will also be provided with a Google email address to correspond with their teacher and classmates on projects, as well as to turn in assignments. Students may choose to utilize their own electronic tablets (iPads, Kindle Fire, Samsung, etc.) cell phones, laptops, and reading devices for educational purposes. Please be reminded that your student is responsible for the safety of their personal device and must utilize the district's Wifi to ensure their internet safety. All use of these devices will be for educational purposes and must be approved by the individual teacher.

Teacher Contact

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Phone: (702) 799-4699

Room 804