



LINCOLN-WOODSTOCK COOPERATIVE SCHOOL DISTRICT COURSE SYLLABUS

Course Name: Grade 7 Math
Semester: Full Year Course
Teacher: Sarah Kraus

Course Description: This course is designed to extend and apply grade 6 math content knowledge in the following content areas: the number system, ratios and proportional relationships, equations and inequalities, geometry, and statistics and probability. Problem solving and critical thinking skills, along with the use of technology, will be emphasized and utilized throughout the course.

PRE-REQUISITES: Completed Grade 6 Math course with a passing grade for the year or competence demonstrated on math placement exam.

Competencies or Standards Assessed:

1. Ratios and Proportional Relationships 7.(RP)
2. The Number System (7.NS)
3. Expressions and Equations (7.EE)
4. Geometry (7.G)
5. Statistics and Probability (7.SP)

Mathematical Practices and Problem Solving Standards:MP1.-MP.8

Anchor Texts or Major Curriculum:

Grade 7 Envision Math 2.0 Savvas Realize Program (includes Volume 1 and Volume 2 textbooks and digital platform)

Course Outline (major units of study):

Unit Title	Essential Question or Overarching Understanding
Topic 1: Integers and Rational Numbers	How can the properties of operations be used to solve problems involving integers and rational numbers?
Topic 2: Analyze and Use Proportional Relationships	How can you recognize and represent proportional relationships and use them to solve problems?
Topic 3: Analyze and Solve Percent Problems	How can percents show proportional relationships between quantities and be used to solve problems?
Topic 4: Generate Equivalent Expressions	How can properties of operations help to generate equivalent expressions that can be used to solve problems?
Topic 5: Solve Problems Using Equations and Inequalities	How can you solve real-world and mathematical problems with numerical and algebraic equations and inequalities?
Topic 6: Use Sampling to Draw Inferences About Populations	How can sampling be used to draw inferences about one or more populations?
Topic 7 Probability	How can you investigate chance processes and develop, use, and evaluate probability models?
Topic 8: Solve Problems Involving Geometry	How can geometry be used to solve problems?



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Portrait of a Learner

Independent Learner

I make thoughtful plans and do my best to reach personal goals using feedback to work through challenges.

Responsible Collaborator

I work with others to achieve shared goals by listening actively, contributing ideas, and managing conflict.

Critical Thinker

I analyze information, ask thoughtful questions, and apply reasoning skills to solve problems and make decisions.

Effective Communicator

I express ideas clearly, adapting strategies based on the audience, setting, and/or purpose.

Global Citizen

I show that I care and take responsibility by helping in my community and the world around me.

Additional Classroom Expectations:

Be respectful, be responsible, and be open-minded.