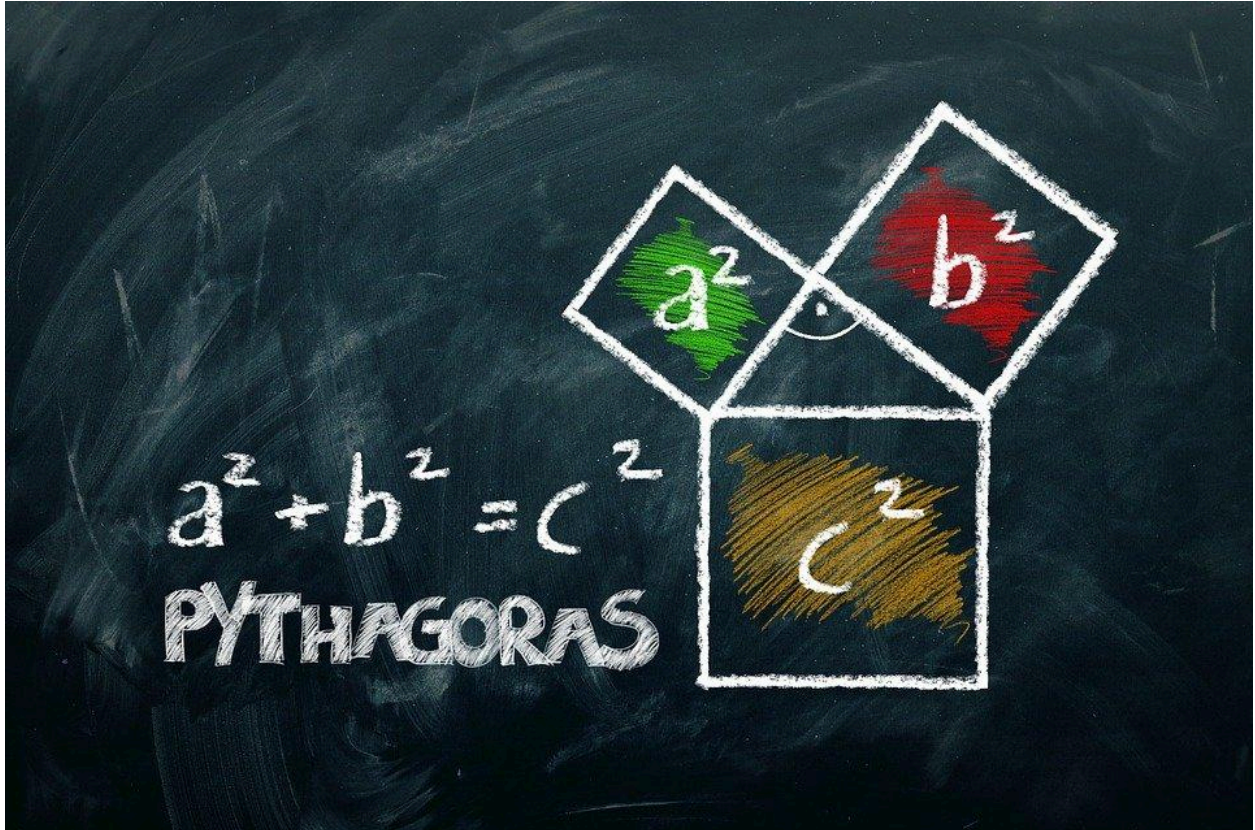
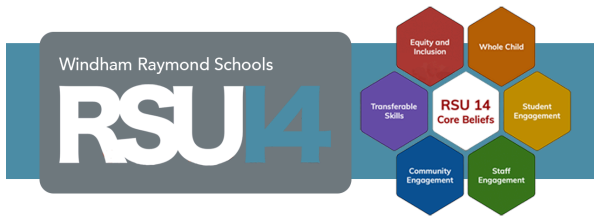


Math - Grade 8



Windham Middle School



Curriculum Guide

Windham Middle School

Grade 8, Mathematics

All 8th grade students will work through the Ready Math Classroom lessons and activities. Instruction will include the whole group, small group, and individual activities. Students will also have individualized lessons through their pathways based on their diagnostic results.

Standards and Performance Indicators

Expressions and Equations

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

Functions

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

Geometry

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

The Number System

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

Statistics and Probability

- Investigate patterns of association in bivariate data.

21st Century Skills/Guiding Principles

- Clear and Effective Communicator**
- Self-Directed and Lifelong Learner**
- Creative and Practical Problem Solver**
- Responsible and Involved Citizen**
- Integrative and Informed Thinker**

Units and Course Activities

Units

- Geometric Figures: Rigid Transformations and Congruence
- Geometric Figures: Transformations, Similarity, and Angle Relationships
- Linear Relationships: Slope, Linear Equations, and Systems
- Functions: Linear and Non-Linear Relationships
- Integer Exponents: Properties and Scientific Notation
- Real Numbers: Rational Numbers, Irrational Numbers, and the Pythagorean Theorem
- Statistics: Two-Variable Data and Fitting a Linear Model

Curriculum Materials/Activities may include:

Ready Math Classroom Student Texts

iReady Diagnostic Pathways - personalized instruction

Digital Math Tools - Desmos

Learning Games

Activities:

- Engage in the Mathematical Practices
- Try - Discuss - Connect Routine
- Modeled and Guided Instruction
- Guided Practice
- Independent Practice
- Interactive Tutorials