

Mathematics 8

Teacher: Mr. Ng
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Course Material: *Mathlinks 8, handouts, course website*
Required: Pencil, Scientific Calculator, Paper

Course Content

Unit 1 Squares, Roots, and the Pythagorean Theorem

- Perfect squares and cubes
- Squares and cube roots (including rational values)
- Estimating the square root of non-square values
- Understanding and applying the Pythagorean Theorem

Unit 2 Operations with Fractions

- Use models to add and subtract fractions
- Use models to multiply and divide fractions
- Solve problems with fractions

Unit 3 Measuring Right Prisms and Cylinders

- Explore and match nets to 3D objects
- Explore strategies to determine and develop the formula for the surface area of 3D objects
- Explore strategies to determine and develop the formula for the volume of 3D objects

Unit 4 Percent, Ratio, and Rate

- Relate fractions, decimals, and percent
- Financial literacy: sales tax, discounts, best buys
- Explore and compare ratios (two-term and three-term ratios)
- Explore and compare rates

Unit 5 Linear Equations and Graphing

- Two-step equations (solving two term equations)
- Solve equations using models (balance scale method, algebra tiles, diagrams)
- Solve equations using algebra
- Solve equations using the Distributive Property
- Creating a table of values
- Graphing linear relations
- Four quadrants, integral coordinates (x, y)

Unit 6 Measures of Central Tendency and Probability

- Understanding central tendency (mean, median, mode, range, outliers)
- Applications of Central Tendency
- Probability: Two independent events
- Tree diagrams, tables, graphic organizers

Unit 7 Geometry

- Sketch views (top, side, front) of 3D object
- Construct 3D objects from views

Additional content: Understanding patterns, logic, puzzles, and games

Classroom Expectations and Procedures

- **Regular attendance:** Students who are absent (illness, school activities, vacation, etc.) are expected to catch up on any missed work, quizzes and tests.
- **Arrive on time with all necessary materials** (textbook, scientific calculator, handouts, paper, pencil, etc.).
- **Make use of class time** to complete assigned work as students are expected to complete assigned work by the next class.
- Come in for **extra help**, if needed. Do not wait until the day before the test. Morning tutorials are available everyday.
- Absolutely **no cell phones** as a school-wide policy.
- MP3 players, I-pods, and other electronic devices are not permitted in class, unless expressly stated by the teacher.
- Treat all members of the classroom with **respect and consideration**.

How to Find Me

Most of my course content is found on my school website at <https://ngwindsor.weebly.com/>. I'm available to be reached digitally via MS Teams as 'Anthony Ng' as well as through my email at ang@sd44.ca. My classes are often in Room A316 or E206 so I can also be called through the school telephone directory in an emergency at 604-903-3700. I can be physically reached inside the school either during morning tutorial time from 8:30-9:10am every weekday in Room A316, at lunch in Room A316, as well as after 3pm on certain days. For after-school times, it is best to set up a meeting time prior to the date you would like to meet because I may have meetings or prior engagements and thus be unavailable on certain dates.