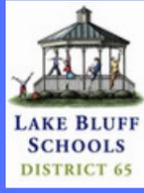
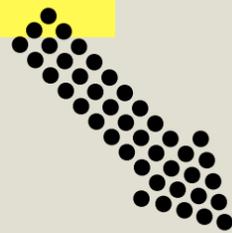
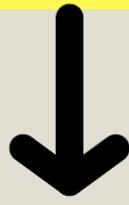
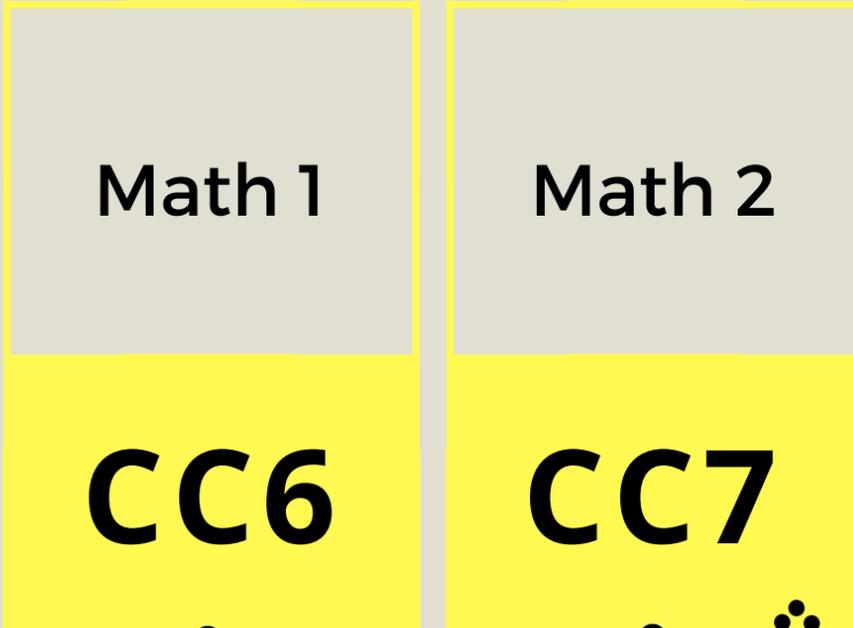


Lake Bluff Middle School

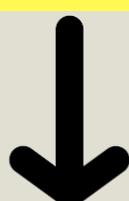
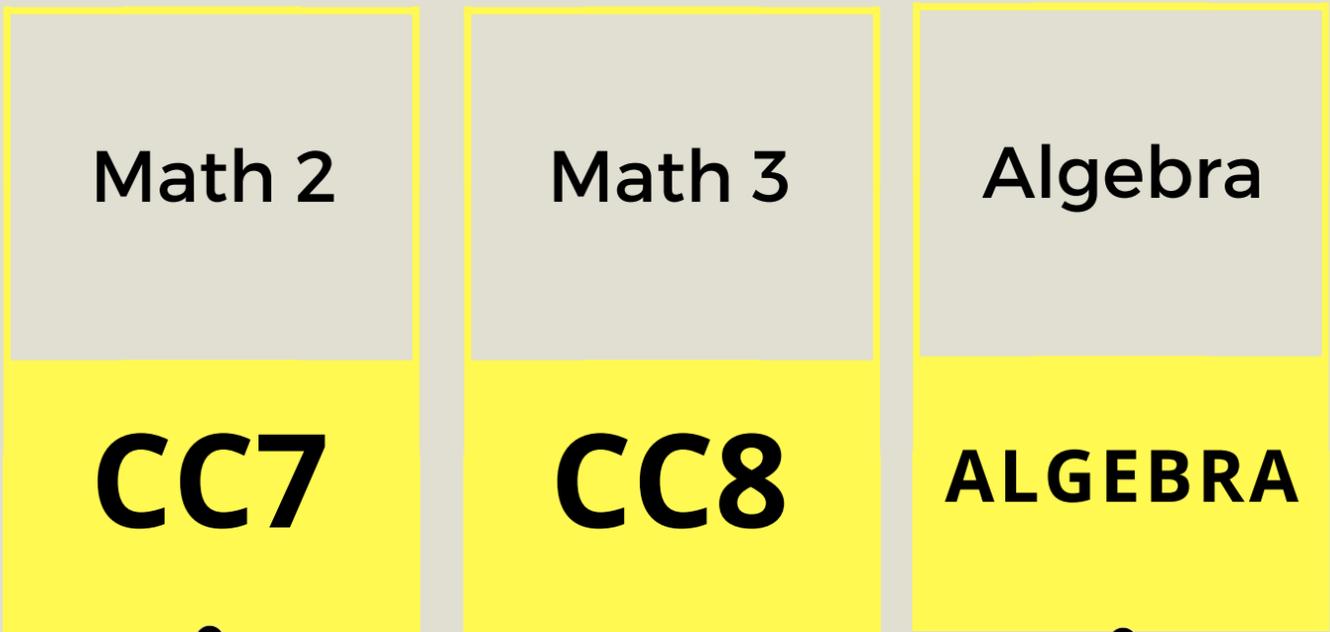


Math Course Sequence

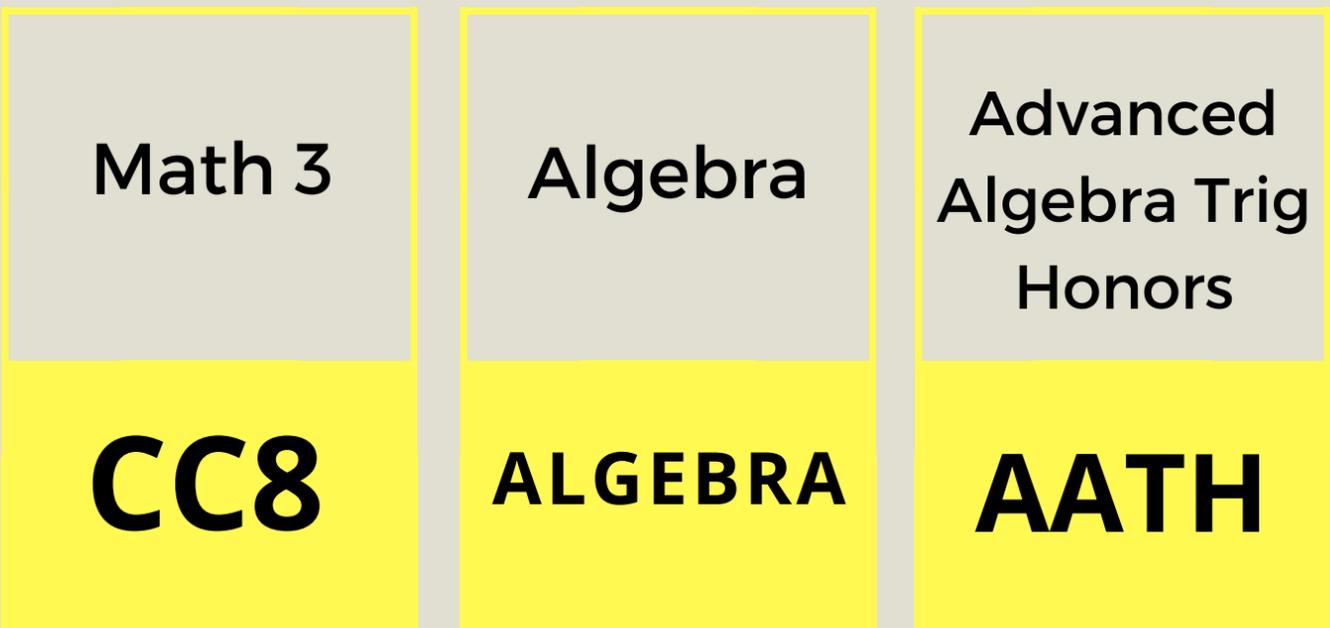
6th Grade



7th Grade



8th Grade



ALGEBRA



Projected Pathway



Alternate Pathway

Math Course Descriptions

Math 1

Teaching and learning will focus on the 6th grade CCSS.

Topics include:

- proportional thinking and using concepts of ratio and rate to solve problems;
- extending the number to the system of rational numbers, including negative numbers and compare integer values;
- compute fluently using common factors and multiples;
- extend previous understandings to divide fractions by fractions;
- rational numbers including the four operations with fractions;
- writing, interpreting, solving and using expressions and 1-step equations with whole numbers;
- real-world mathematical problems involving area, surface area and volume, including the use of the coordinate plane;
- and developing understanding of statistical thinking.

Math 2

Teaching and learning will focus on the 7th grade CCSS.

Topics include:

- proportional relationships, including scale drawings to solve real-world problems;
- operations and applications of fractions to add, subtract, multiply and divide;
- writing, interpreting, solving and using expressions and equations as solutions to problems;
- real-world mathematical problems involving angle measure, area, surface area and volume, including the use of the coordinate plane;
- writing, interpreting, solving and using expressions and equations as solutions to problems;
- statistics including inferences about a population and using probability models.

Math 3

Teaching and learning will focus on the 8th grade CCSS.

Topics include:

- using linear equations to model, analyze and solve problems;
- understand the slope of a line as the rate of change;
- solve linear equations and systems of linear equations;
- understand a function as a rule that relates two quantities and translate between different representations of a function;
- study geometric transformations (translations, rotations, reflections, dilations);
- know and justify the Pythagorean Theorem, and use the Pythagorean Theorem to find unknown distances.

Algebra 1

Teaching and learning will focus on the Algebra 1 CCSS.

Topics include:

- linear equations, applications and graphs;
- quadratic equations, operations of polynomials, applications and graphs;
- radicals: simplifying, operations, applications;
- exponential functions & decay, operations of monomials;
- multiple methods to calculate slope & y-intercept, connections to rate and speed;
- data collection tables, patterns of growth, notation for sequencing;
- two-variable data, correlation coefficients, analyzing residual plots;
- parabola sketches, x-intercept, vertex and use of square root;
- linear & non-linear inequalities, word problems, graphs and analysis;
- speed and accuracy of each above mentioned skill;

AATH

This is a traditional Algebra 2 with Trigonometry course, aligned with the AATH course offered at Lake Forest High School. Students will extend their Algebra 1 learning in area of functions, systems, equation solving, factoring, quadratics and exponentials. Students will explore new concepts including radicals, conics, number theory, matrices, and trigonometry. A high level of independence and persistence is expected of students in this course.