

MATH & SCIENCE

**Welcome Future Huskies!!!
Class of
2024**

**Naperville North
8TH Grade Orientation - 2020**



MATHEMATICS

Kathleen Williams, Algebra Specialist

Howard V. Phelan, Instructional Coordinator

ALGEBRA...

The cornerstone of all of high school math.

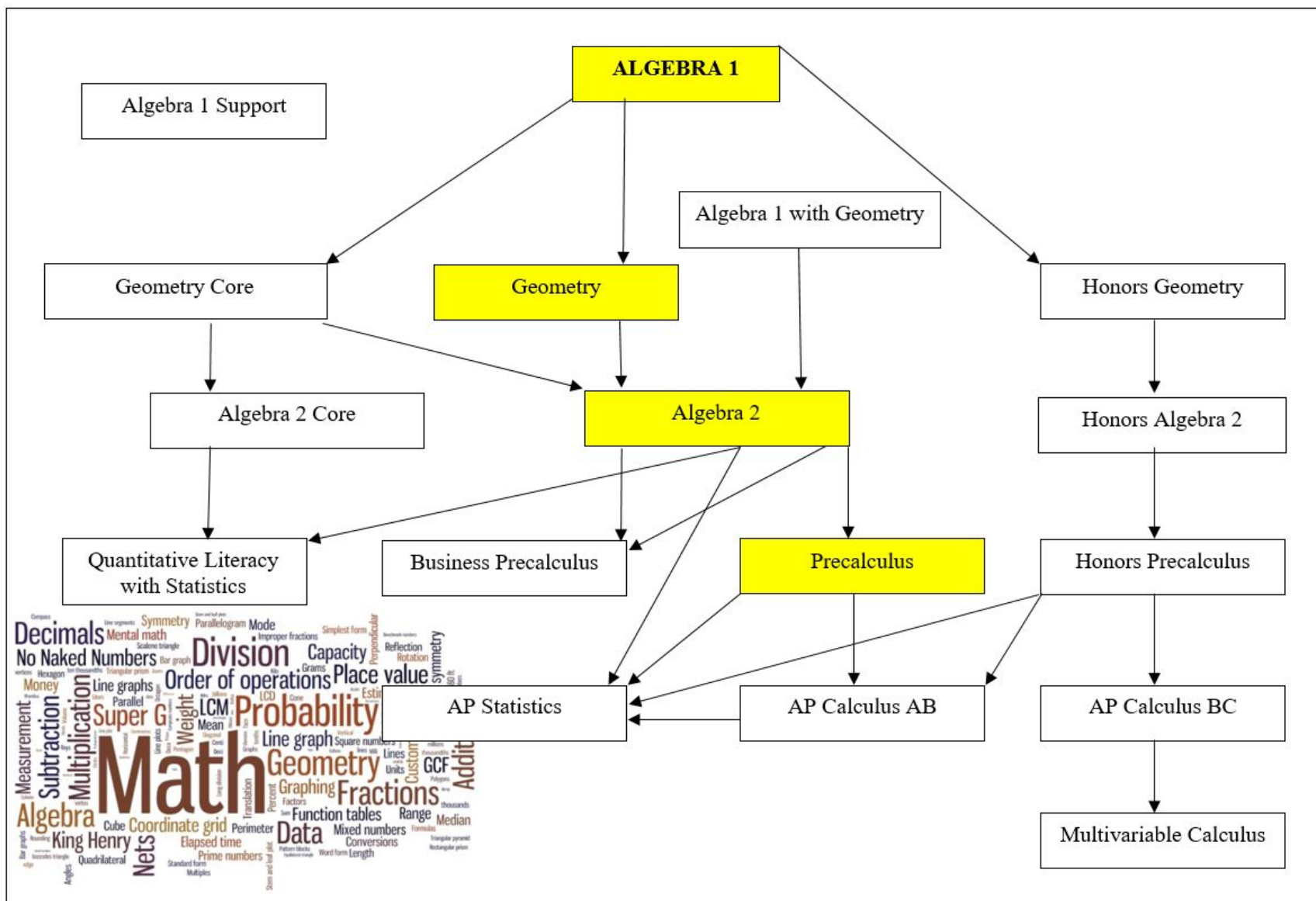
Graduation Requirements

- Naperville North requires 3 years of Math including Algebra 1 for graduation. (Algebra 1 may be completed in Junior High)
- Most colleges prefer students to complete 4 years of Math.

Algebra 1 and beyond require a graphing calculator.

(TI-84 is recommend)

Algebra 1 Strand



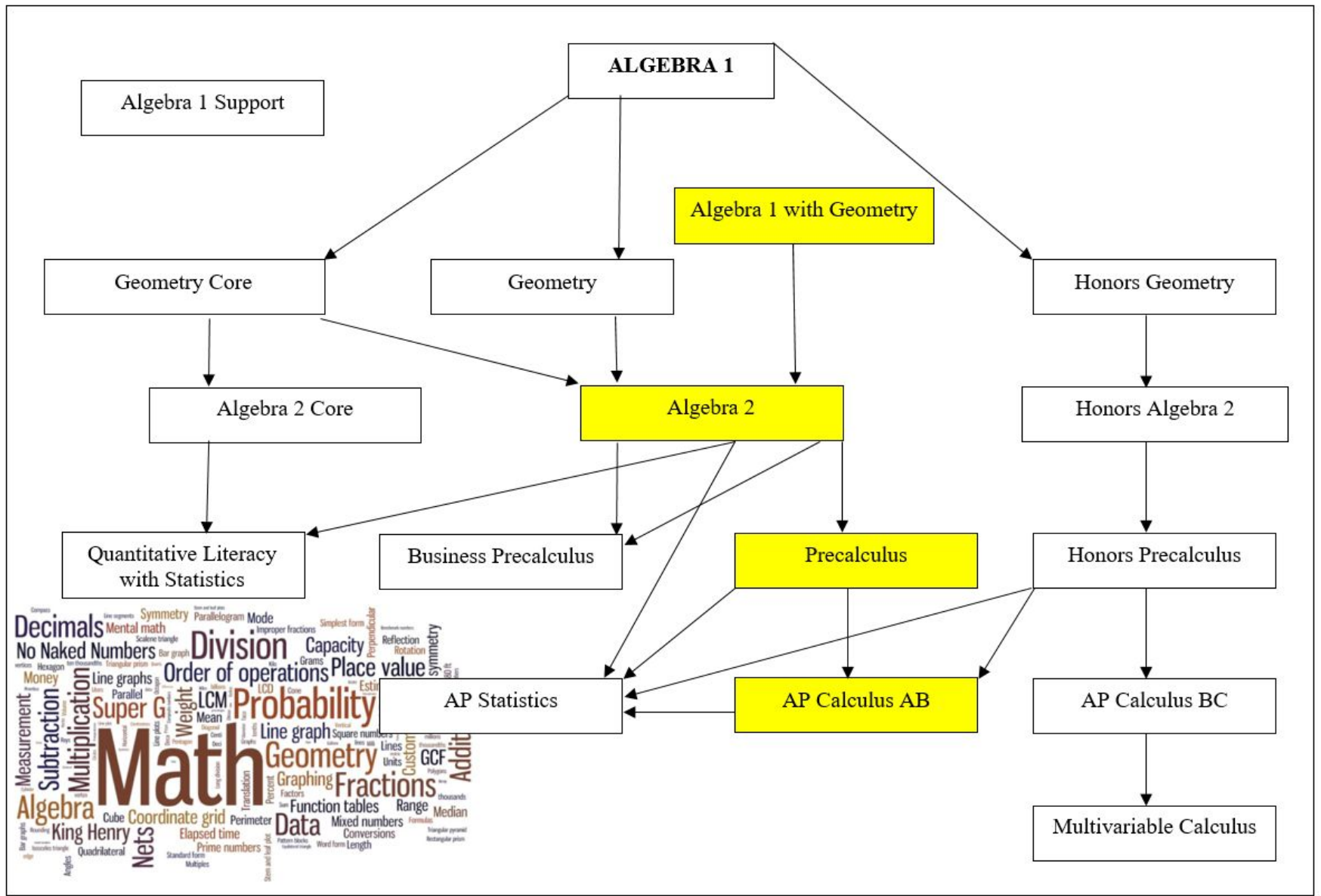
Algebra 1 Strands

Freshman year **Algebra 1**

Algebra 1 → **Geometry** → **Algebra 2** → **Pre-Calculus**

- A, B, C in regular 8th grade math: Low C, D or F in Honors 8th grade
- Regular 8th grade math is algebra based, but not the Algebra 1 course
- Algebra is the Key to success in future math courses
- Students that want to brush up for Algebra 1 may consider taking the Algebra Essentials Summer School course.

Algebra w/ Geometry Strand



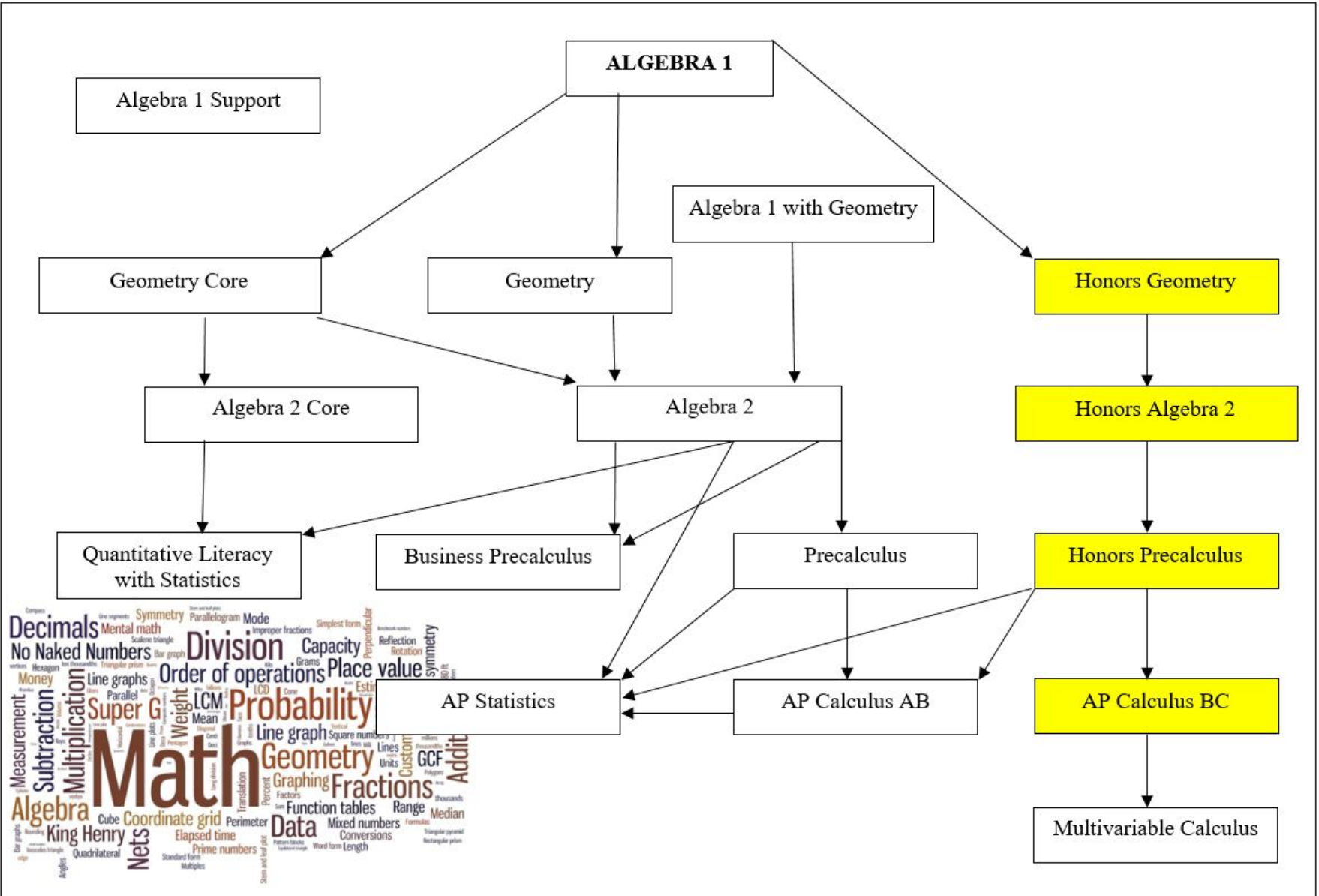
Algebra w/Geometry Strand

Freshman year **Algebra w/Geometry**

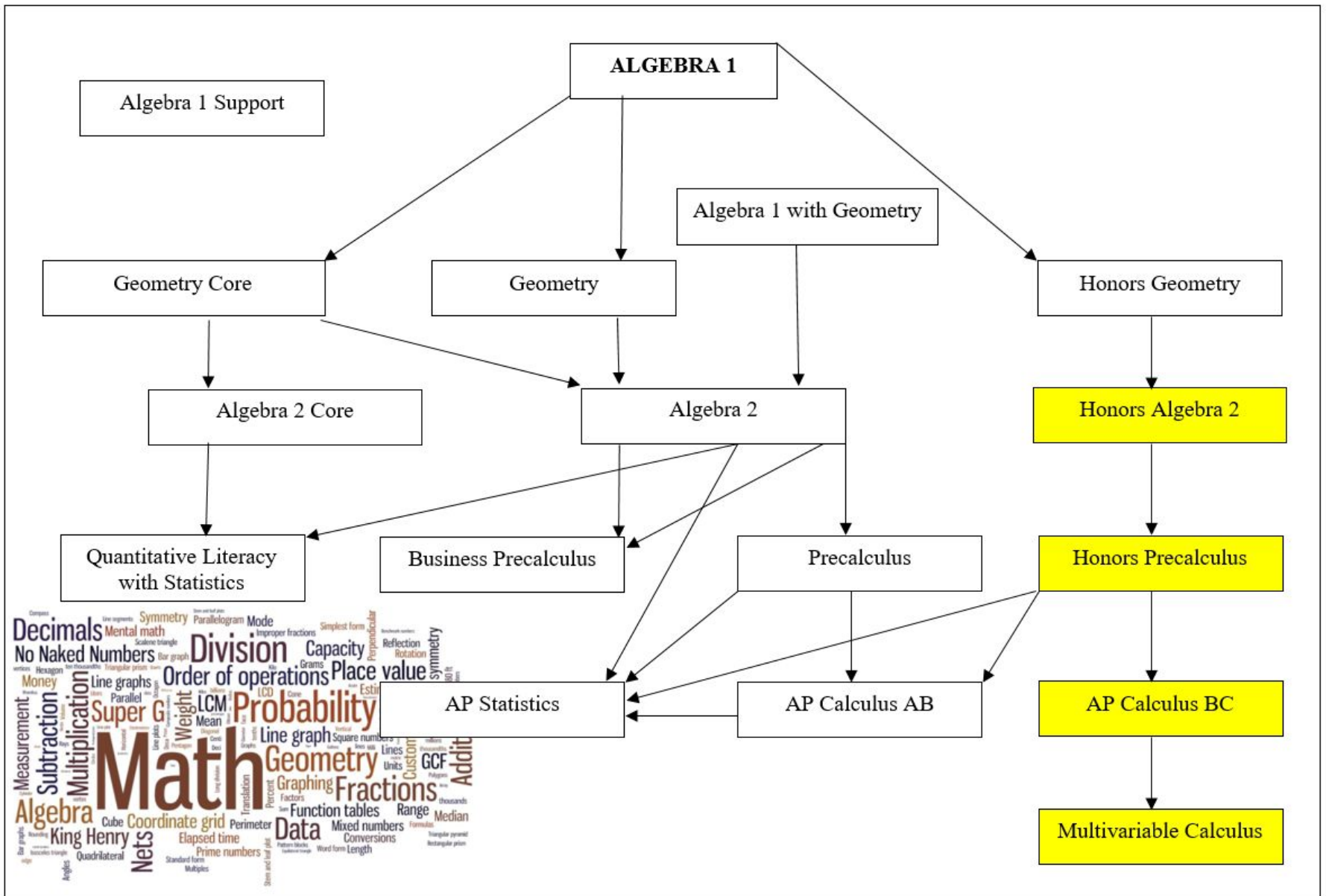
Alg. w/Geo → Algebra 2 → Pre-Calculus → AP Calc

- High A in 8th grade math (1st & 2nd Trimester)
- Created for students that enjoy and excel in math
- Fast pace course, with multiple concepts in a lesson
- Students/Families may self select to be in the course.
- Students with a “C-” at the end of the 1st semester in Algebra with Geometry will be moved to a 2nd semester Algebra 1 course.
- Goal of the course is to take AP Calculus senior year.

Honors Geometry Strand



Honors Algebra 2 Strand



Honors Math Strand

Freshman year **Honors Geometry** or **Honors Algebra 2**

H Geometry → **H Algebra 2** → **H Pre-Calculus** → **BC Calculus**

H Algebra 2 → **H Pre-Calculus** → **BC Calculus** → **MVC Calc**

- **A** or High **B** in 8th grade Honors Math (Algebra)
- High School honors are weighted courses
- Students may move to an Honors Math course after the completion of Algebra 1 with a High **A** and Teacher Recommendation.

Moving into Honors

Honors Math Placement

- Student has completed the required Prerequisites with a High **A**.
- Student does not require repetition of examples to master a new concept.
- Student easily recall past knowledge and applies to new situations.
- Student can explain the mathematics to his/her peers.
- Students moving into Honors often earn a grade or grade and half lower grade. Are you ok with earning a “B”?

AP Statistics anytime after completing Algebra 2.

SCIENCE

Mr. McWhirter

Science Sequence

9th Grade: Principles of Chemistry - Chemistry - Honors Chemistry

10th Grade: Biology - Honors Biology

11th Grade: Physics - AP Physics 1 - Electives

12th Grade and Electives

AP Chemistry

AP Biology

AP Physics 1 & 2

AP Physics C

AP Environmental

Earth Science

Astronomy

Research and Design

Advanced Chemistry

Biotechnology

Anatomy

STEM Capstone

2 YEARS OF SCIENCE ARE REQUIRED - MOST SCHOOLS WANT 4 YEARS

Freshmen Science

Principles of Biology/Chemistry

Algebra 1

AND 8th grade teacher recommendation

Chemistry

Algebra 1

Honors Chemistry

Honors Algebra or Higher

AND Teacher Recommendation

Chemistry

COURSE DESCRIPTION: This course is a standards-based study of fundamental chemical concepts based on the Next Generation Science Standards.

- Matter and Its Interactions
- Organization of the Periodic Table
- Bonding and Intermolecular Forces
- Chemical Equations and Introduction to Stoichiometry
- Elements and Stars

Honors Chemistry

Students considering this course should be self-directed learners with teacher support and strong reading comprehension skills. Students should consider their entire schedule when selecting a weighted course. Students who are most successful in this course are also recommended to Honors English.

Honors Students:

- **Have a Passion for Science**
- **Enjoy Challenging themselves beyond the classroom**
- **Persist with difficult tasks**

HELP!

Math and Science Help Center & Peer Tutoring

- Mornings & Lunch Hours in the Lit Center (Rm 256)
- Math Teacher assisting students
- Students assisting students

After School Help

- Wednesday & Thursday
- After School 3:15-4:15pm in the Learning Commons
- Teachers assisting students

Contact Information

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SCIENCE

Andy McWhirter, Instructional Coordinator



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