

Academic Extensions



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7th Grade Agenda



Math Pathways/Courses

Flex

Enriched Core

Advanced Core Courses

Additional Opportunities





Grade Level Math Pathways

Math 6

PreAlgebra 7

Algebra/Honors Algebra 8

Geometry/Honors Geometry

Algebra 2/Honors Algebra 2

FST (Functions, Statistics, Trigonometry)

PreCalculus

AP Calculus

Calculus 3

High school graduation requirement

College credit available



Above-Grade/Accelerated Level
Math
Pathways

Mosaic 5

Honors PreAlgebra 6

Honors Algebra 7

Honors Geometry 8

Honors Algebra 2

AP Statistics

Honors PreCalculus

AP Calculus

Calculus 3

High school graduation requirement

College credit available

Incoming 7th graders



Grade level: PreAlgebra 7

Above-grade level: Honors Algebra 7

For students who have completed PreAlgebra or have shown mastery of standards.

All 6th graders will take district math assessment in May to determine appropriate course placement at Central Middle School. More information will be shared later this spring.



2020-2021 GRADE LEVEL

ACCELERATED MATH

Honors Algebra 7

CENTRAL MIDDLE SCHOOL
Inspiring each student every day

(2 sections)

Section 1234

- Process information more deliberately
- Benefit from:
 - A few more examples
 - Activities to reinforce concepts
 - Fewer homework problems

Section 1235

- Process information more quickly
- Minimal notes are sufficient for hw success including variations of what was shown in class
- More extensive hw for appropriate practice

Section Placement



(CMS will place all Honors Algebra students)

- 6th grade algebra placement tests
- Student survey to collect self-reported learning preference data
- Consult 6th grade teachers for confirmation of section

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Importance of Appropriate Placement



Fast Processor in Deliberate Processing

- Impatient in class
- Impatient with other learners
- Do not experience enough daily practice
- Enjoy math less

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Importance of Appropriate Placement



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Deliberate Processor in Fast Processing

- Less Confident after notes (want more exposure)
- Overwhelmed with workload (daily hw might take hours)
- Feel rushed on assessments
- Begin to feel dumb

Successful Math Students ...



- Take careful notes
- Do homework regularly (show all work as modeled in class notes)
- Correct homework and learn from mistakes
- Bring up questions in class regarding material in which they are not confident
- Study for tests by practicing problems over and over
- Come in for extra help when needed

How To Prepare



- Develop supporting skills (previous slide)
- Solidify current curriculum (6th or Pre-Alg)
 - Online resources
 - Khan Academy
 - Big Ideas
 - Consult your child's 6th grade teacher for more resources (Roughly one chapter per week is sufficient)

Pre-exposure to Algebraic Topics is Problematic for Gifted Students

I know how to do this! I've seen this before!

I totally understood this last year; but I keep getting them wrong?!

Why didn't I see this stuff last year? My teacher was the worst!



Pre-exposure to Algebraic Topics is Problematic for Gifted Students

One of the most significant consequences is that students lose a sense of excitement and discovery in Algebra when they have been exposed to a large part of it before ("Seen it!") but it is not mastered or not enough of the course has been mastered to test out.

What about Summer Classes or Enrichment Opportunities?



- What is your goal for having your child take a summer class?
- What is the advertised purpose behind the course?
 Do they match?
 - To keep thinking mathematically over the summer
 - To inspire a love for mathematics
 - To pursue specific applications of math (robotics, coding, engineering)
 - To get a "head start" on Algebra?

Final Thoughts on Preparation



- Stress a solid foundation in current 6th grade course
- Trust the CMS math teachers to facilitate your child's acquisition and mastery of Pre-Algebra or Algebra 1 without relying on pre-exposure



2020-2021 GRADE LEVEL

Flex

Flex at CMS



Student choice five days a week to encourage ownership of learning and exploration beyond classroom instruction

- Support
- Extension
- Discovery

Flex gives students choice in challenge and enrichment



Extension: This is for students who would like to dive deeper into the learning targets. "Going beyond" what was covered in class. Extension could come through direct instruction, collaboration with others, or independent work time.

Discovery: Experiences are offered based on student passions, interests and/or curiosities not directly linked to standards. Discovery could be delivered through direct instruction collaboration with others, or independent work time.



ENRICHED CORE 7 COURSES English, Science and Social Studies

Enriched Core 7 Courses



Enriched courses deliver grade-level standards with rigorous coursework and high-level discussions, with an emphasis on independent learning. Successful students typically have strong verbal skills and writing ability with above-grade level reading ability. Highly motivated students who are willing to persevere may self-select these courses.

- Science
- English
- Social Studies
- Spanish Language Social Studies (for Spanish Immersion students)

Enriched Science 7



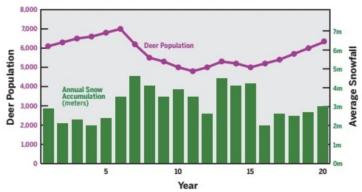
- Self-led science fair experiment
- Create and post a video
- Science Connection podcasts (twice a month)
- Longer assignments and tests with more challenging questions

Use the graph below to:

- 1. Identify what is biotic and what is abiotic.
- 2. Describe how abiotic factors impact population using examples from the graph.

Figure 2.

Deer Population and Average Snowfall



Enriched English



Same learning targets for English and Enriched English:

- I can organize my writing by utilizing appropriate structure
- I can analyze a theme or a main idea of a text

Enriched will use texts that are at a higher reading level and more complex. For example: <u>Fahrenheit 451</u> compared to <u>The Giver</u>.

There will be less focused instruction on writing skills as students are expected to have strong writing ability including topic sentences, supporting details, and conclusions.



ADVANCED CORE 7 COURSES

Advanced Core 7 Courses



Advanced Courses are designed for MOSAIC and additional highly capable students. These courses provide grade-level standards with more rigor than Enriched classes including advanced discussions and research projects using more abstract and interdisciplinary thinking. Advanced courses are available to MOSAIC and students who meet entrance criteria. Please indicate your interest on your registration.

- Science
- English
- Social Studies



Advanced Core 7 Courses



English

Analyze & communicate a text's depth and complexity.

For example: Find the theme and tracing its development throughout the novel. Create a slide presentation with supporting evidence. Use correct text and MLA book citations.

Social Studies

- Faster paced or condensed units
- History Day Project
- More debate & public speaking
- More depth on fewer units (less of a survey course)

Science

- Monthly assigned reading & book report
- Independently created and carried out controlled experiment
- More detailed lab reports and written conclusions

Advanced Core 7 Courses



- Designed for MOSAIC and any student who qualifies based on specific entrance criteria.
- Mosaic students are eligible for Advanced courses of their choice
- Non-Mosaic students indicated interest on registration form and register for corresponding Enriched Core course
- Not available for Spanish Language Social Studies
- Entrance criteria must be met for non-Mosaic students
 - Fastbridge aReading 98th percentile AND
 - Successful writing assessment
 - Science has an additional math requirement

Additional Opportunities



- Course placement is usually determined by previous coursework. When prior learning is unclear, students may be assessed on their mastery of standards to determine course placement.
- Some students may choose online course options (at their expense) for acceleration. CMS will accept completion under certain guidelines.
- Qualified students who are above-grade level in particular content areas may take appropriate courses at Eden Prairie High School
- University of Minnesota Talented Youth Mathematics Program (UMTYMP) is a tuition-based program that provides a highly accelerated math program for exceptional math students. Registration is in the spring. Find more information at www.mathcep.umn.edu/umtymp



Please feel free to contact me with further questions.

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THANK YOU EDF **CENTRAL MIDDLE SCHOOL**

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