

Special Darien Board of Education

Curriculum Committee Meeting

Thursday, May 26, 2022

8:30 a.m.

Darien Public Schools' Administrative Offices

35 Leroy Avenue

Board of Education Meeting Room

AGENDA

1. K-5 Math Update
2. 6-12 Math Update
3. Public Comment*
4. Adjournment

AA:nv

*** * The Board of Education meeting will be available to the public in person and via Zoom. Wearing of masks is optional and seating is limited by room capacity. Doors open at 8:15 a.m. for the 8:30 a.m. meeting.**

Those members of the community wishing to participate in public comment may join the meeting via Zoom:

<https://darienps.zoom.us/j/95100132506>

Those members of the community wishing to view only, should do so through the Darien Youtube link: <https://www.youtube.com/channel/UCUnnvYKBFbFrTWQRuoB6OZA>

In order to reduce audio interference, members of the community are requested not to simultaneously view by Youtube while participating on Zoom.

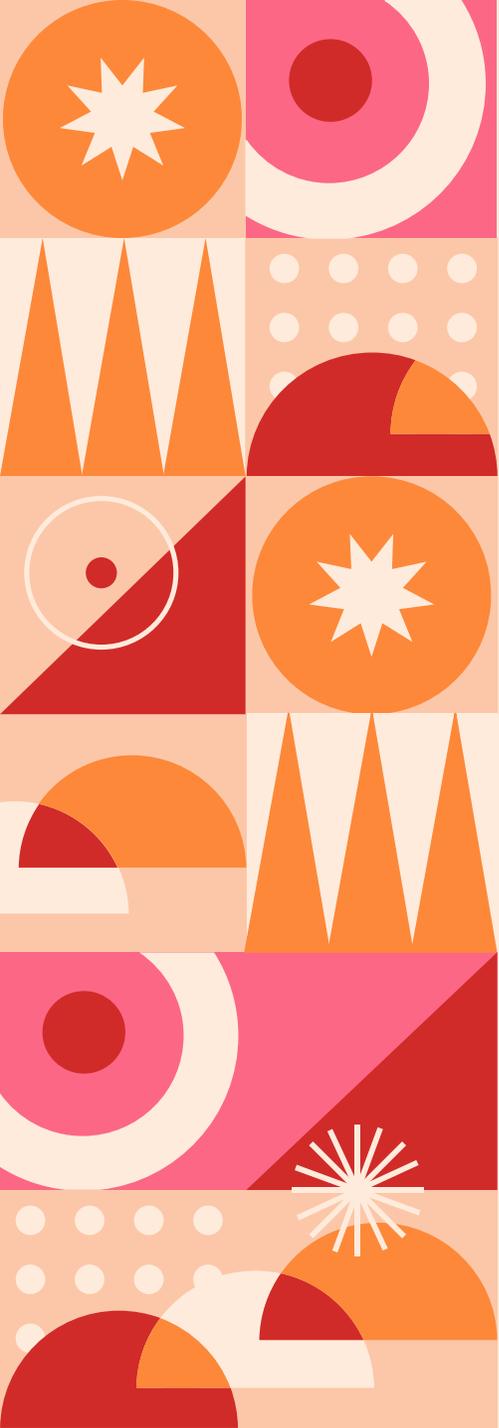


Memorandum

To: Darien Board of Education
From: Christopher Tranberg, Ph.D., Assistant Superintendent of Curriculum and Instruction
Julie Droller, Director of Elementary Education
Felicia Bellows, Ed.D., Mathematics Dept. Chair, 6 - 12
RE: BOE Curriculum Math Update
Date: May 26, 2022

The math curriculum update includes two presentations focusing on programmatic information for grades K-5 and 6-12. With *Math in Focus* still in its early stages of implementation, the elementary portion makes connections to our current instructional areas of focus with implementation and professional learning supports that are planned to continue supporting students and teachers. The elementary presentation also references the math acceleration study that will be discussed in greater detail at an upcoming BOE curriculum committee with formal recommendations coming to administration and the Board early this fall.

The 6-12 presentation offers a brief historical overview of the program and then shifts to a focus on current priorities and examples of student learning. Secondary course progressions will be reviewed reflecting examples of the options students encounter when charting an appropriately challenging course of study as young mathematicians.



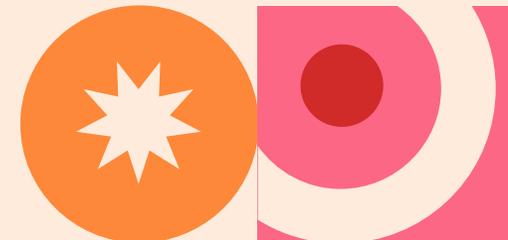
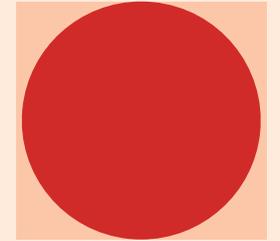
Darien Public Schools:

K - 5

MATHEMATICS

UPDATE

MAY 26, 2022

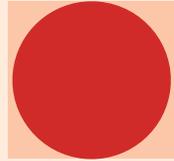


Elementary Math Priority Areas



Math in Focus

Refining Program
Implementation



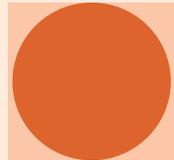
Professional Consultancy

Math Solutions Support



Instructional Focus

Problem Solving & Student
Metacognition



Professional Development

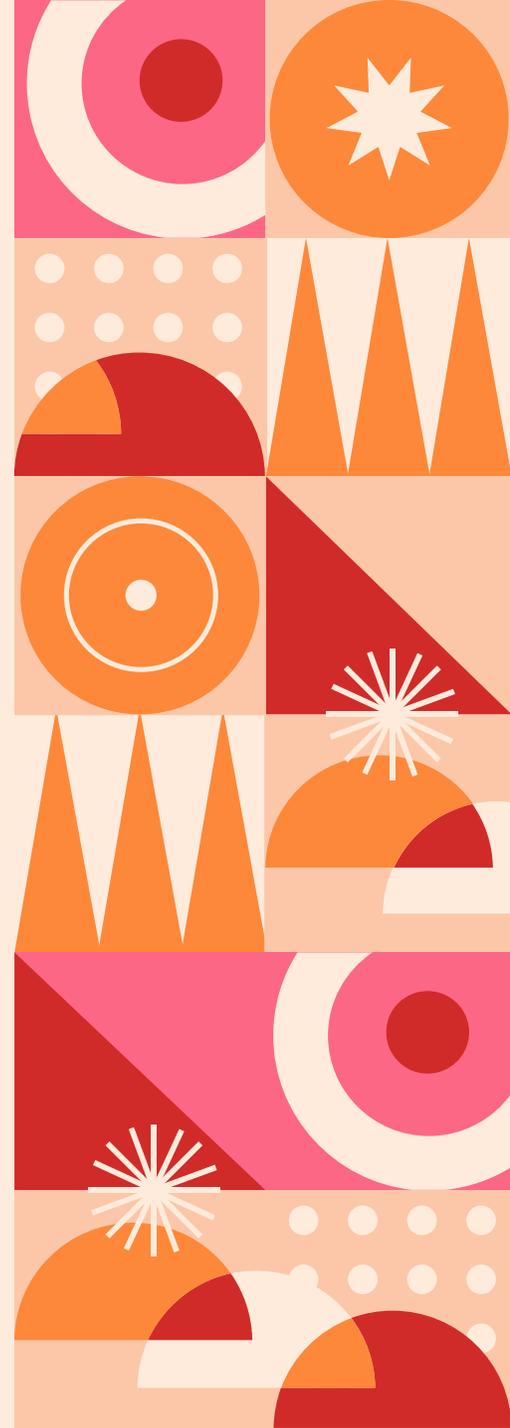
Building Leadership
Capacity in PLC



PLC

Prioritizing Standards

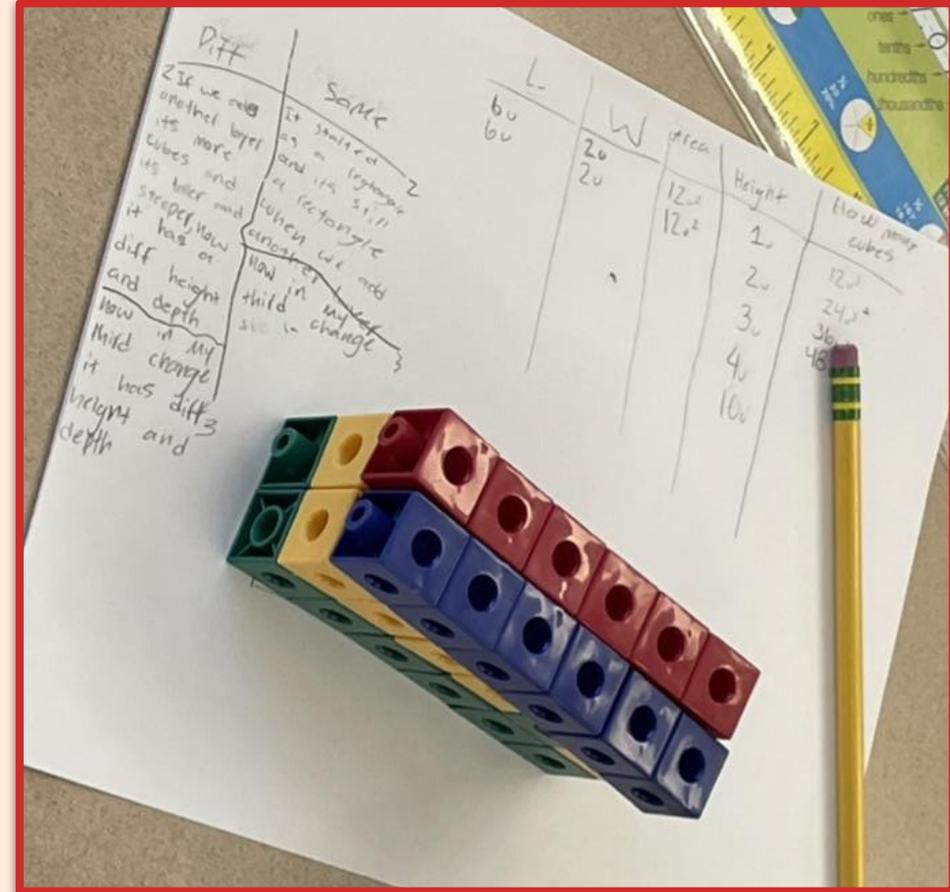
Focused Grade-Level
Content



Students' Thinking



3rd Grade



5th Grade

Math in Focus

PLC Activity	Guiding Questions	Math in Focus 2020 Resources
Setting Learning Goals	<ul style="list-style-type: none">– <i>What are the big ideas of the chapter?</i>– <i>What do we want students to understand?</i>– <i>What do we want students to be able to do?</i>– <i>How do we want students to engage with one another's ideas?</i>	<p>Chapter Overview</p>  <p>Chapter Test</p> <p>PERFORMANCE TASK</p>  <p>Math Talk</p> <p>MATH SHARING</p>
Looking at Data	<ul style="list-style-type: none">– <i>Where are students entering the chapter?</i>	<p>▶ Quick Check</p>



Parent Information Session

Mathematical practices to foster success

How are students challenged

Answer-getting vs. explaining

Curriculum Development



Training for Math Team

Focus on Grades 3-5 Math

Teacher Feedback

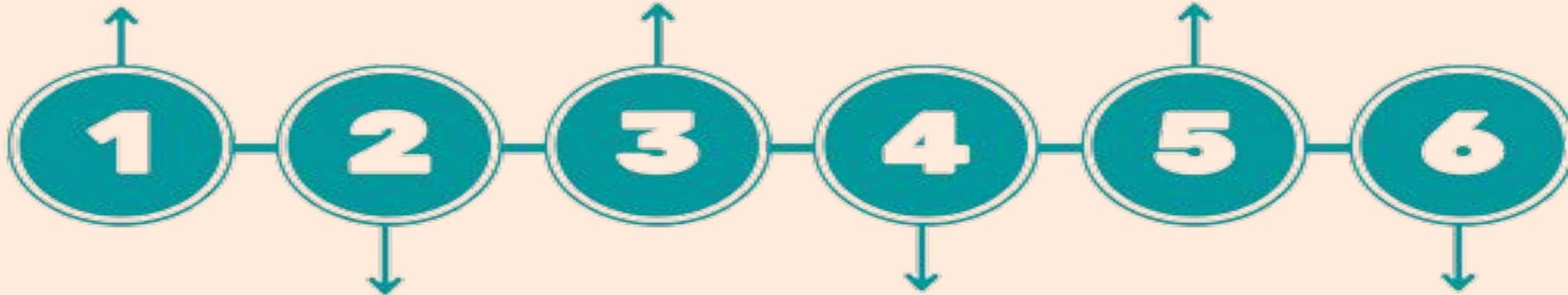
Math Acceleration Committee



Gifted Education Evaluation Considerations

Assessment of District Practices

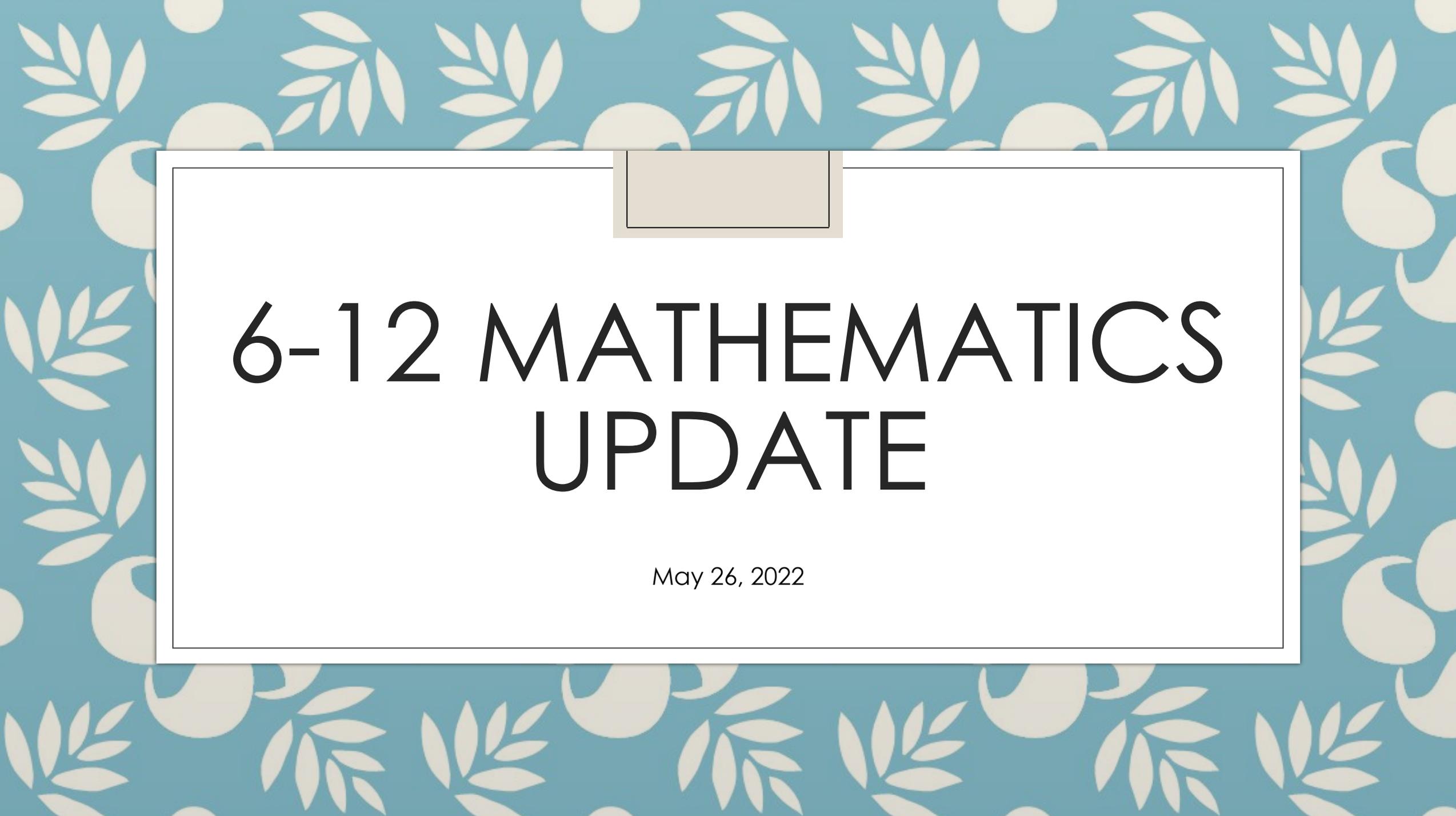
Professional Consultancy



Review of Research

Site Visits and Networking
(hosting Wilton)

Committee Recommendations to
Administration



6-12 MATHEMATICS UPDATE

May 26, 2022

- Secondary Math Research Team Formed
- Grade 5 to 6 Articulation Team
- Administrative Learning Rounds
- Primary Resource Selected - Big Ideas Mathematics
- Revision of Placement Process
- Renaming of Middle School Math Courses
- Interschool Visitations
- Common “Placement Exams” developed
- Alignment of Mid-year/Final Exams
- Co-Teaching Strategies
- Differentiation Strategies
- Teacher Evaluations/Goals
- Revision of Curriculum Documents
- Website for parents and staff

Math Department 6-12 Historical Perspective

Priorities for 2021-2022

Alignment - Shared Calendars

Differentiation

Parent Communication

Mathematical Discourse

Productive Struggle

Making Thinking Visible

Mathematical Modeling

Student Centered Learning (block schedule)



Mathematical Discourse

Grade 8

- Students played “Heads Up” in heterogeneous groups while reviewing polygon vocabulary.
- Cards had pictures of polygons or names of polygons on them where students had to describe the polygon and the student holding the card had to guess the name of the polygon.
- The student holding the card could ask questions to their group members if their group members did not give enough descriptors to be able to accurately name the polygon.
- Students rotated through holding the cards up and guessing.

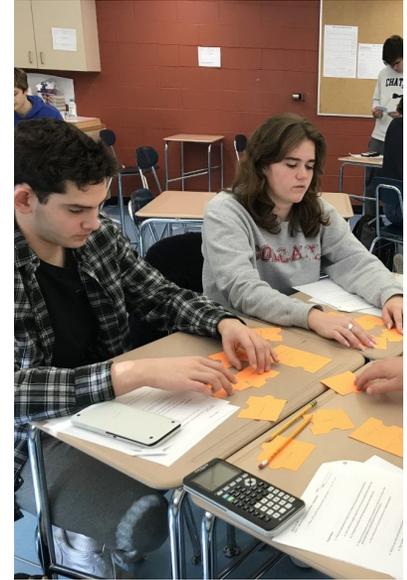
- Grade 7 students work together to prepare for an upcoming test
- Students work together to complete three tasks in an *Escape Room*

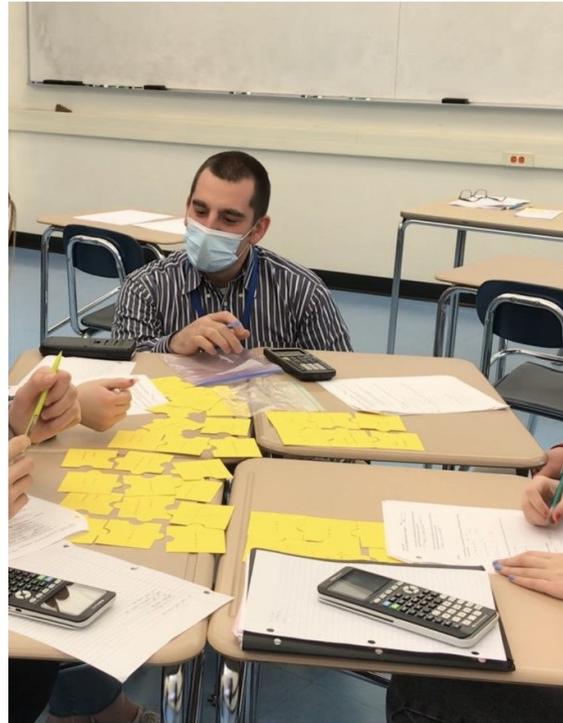
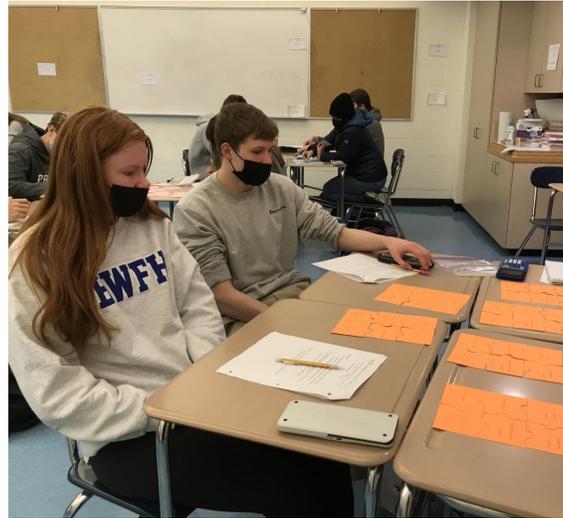
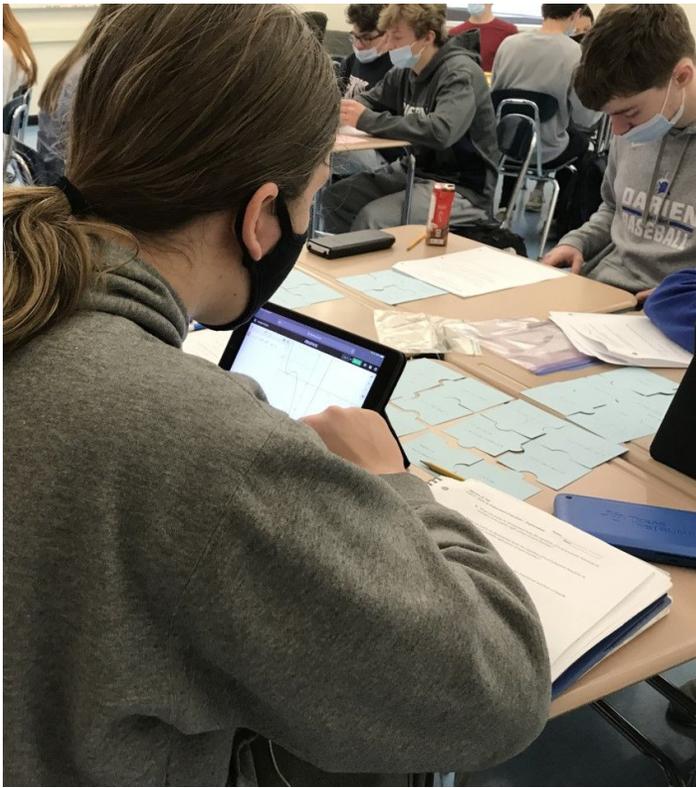


Productive Struggle

Algebra 2

- Students in varying stages of completing the puzzles that each contain six pieces (a graph, the function in standard form, the function in factored form, the x and y-intercepts, the degree and maximum number of bends and the end behavior).





Algebra 2

- Students using Desmos to self-check their work and to verify that their puzzles are completed correctly.
- While using the discovered patterns, students practiced identifying the degree of the polynomial and the maximum number of bends, the x and y-intercepts, the end behavior, how to convert from factored form to standard form and the foundation for converting from standard form to factored form.

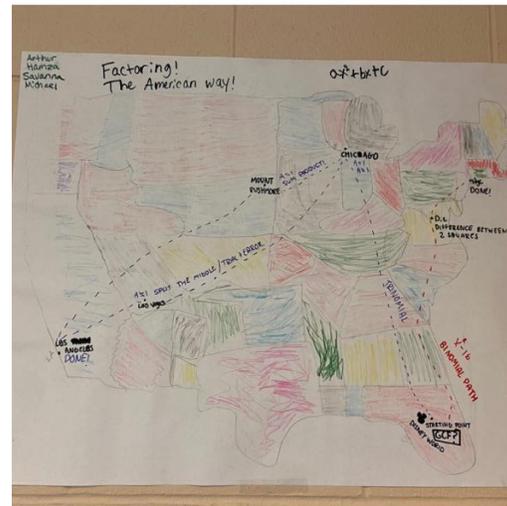
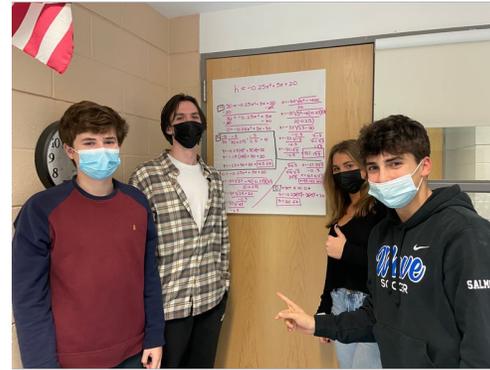
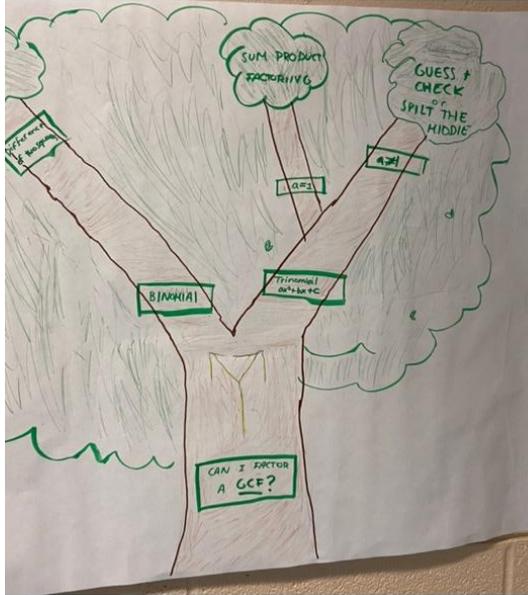
Making Thinking Visible

Algebra 1

- Students worked in groups to design their very own "Factoring Map" to describe the key methods of factoring and when they are used.

Algebra 2

- Collaborative groups of students worked to solve quadratic word problems and created poster with explanations to show their thinking.



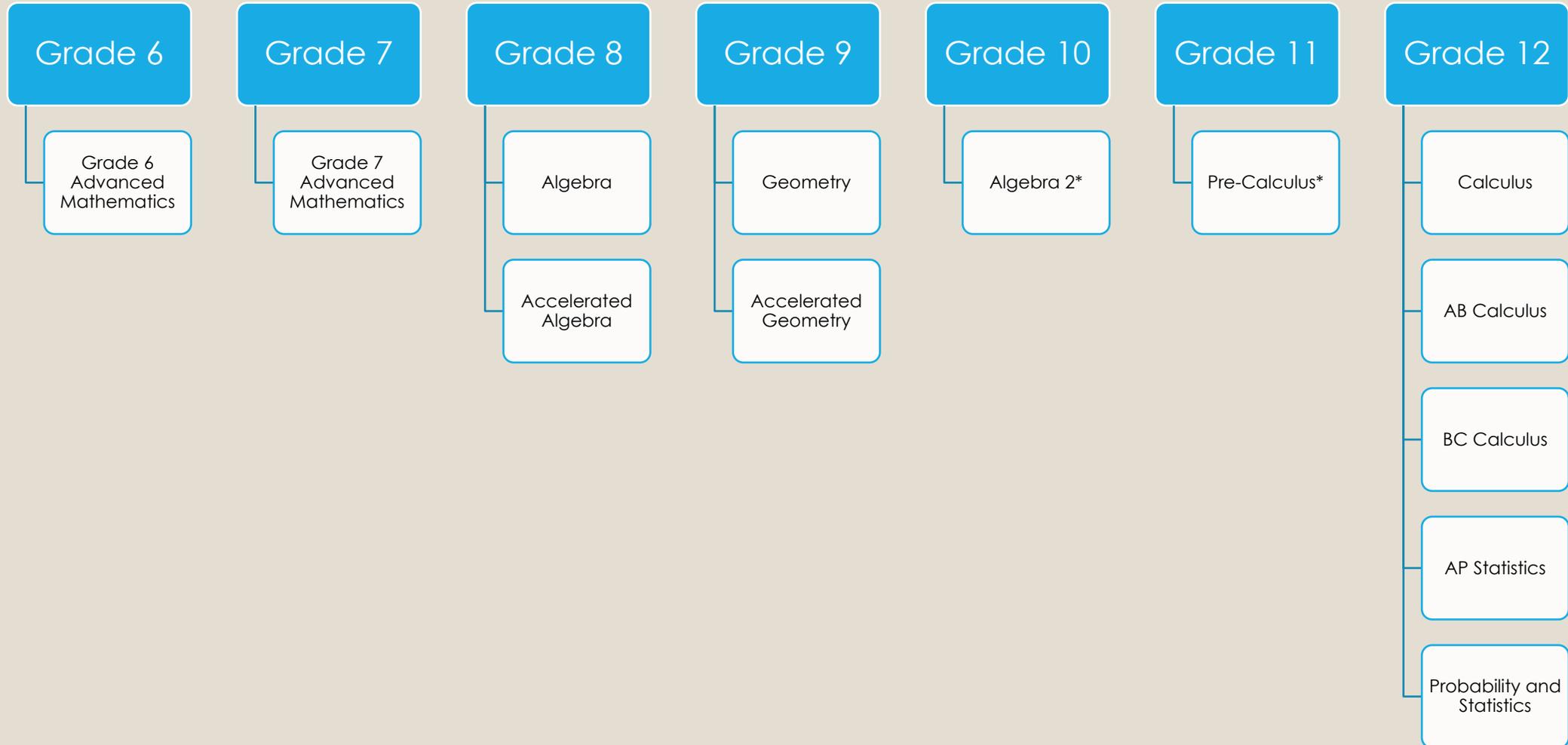
Course Progressions

Sample Traditional Pathway



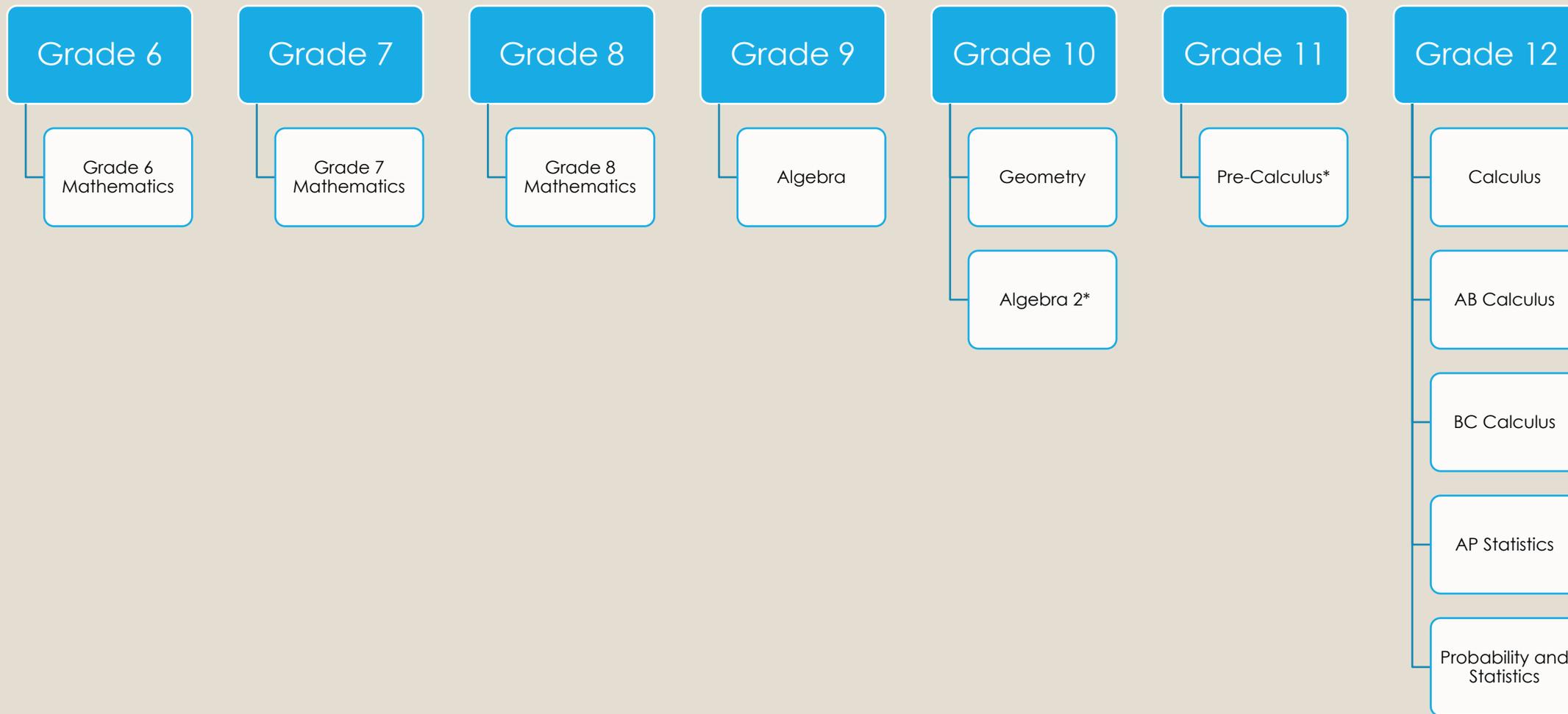
Course Progressions

Sample Accelerated Pathway (MMS)



Course Progressions

Sample Accelerated Pathway (DHS)



Course Progressions

Sample Double Accelerated Pathway (DHS)

