Mathematics

Curriculum Committee
February 1, 2024

Research

- Communicate with several districts within our DRG.
- Meeting with Katherine Gavin, UCONN NEAG School of Education.
- Relevant articles and research.
- Ongoing BOWA Curriculum Leader Meetings.
- Vertical alignment with AMSB through meetings and class visits.
- Classroom visits.
- Ongoing data review - both Standardized and Curriculum Based Measures.

What we have learned

- Our instructional philosophy is being implemented across grade levels.
- Our staff utilizes both compacting and flexible grouping in order to support young mathematicians at work.
- Our students are amazing mathematicians!
- We can always grow and learn!

We want our students to have a strong math identity and a growth mindset.

What is Compacting?

Students complete a pre-assessment.

If they score 90% or higher, they are then given a post-assessment for the same unit.

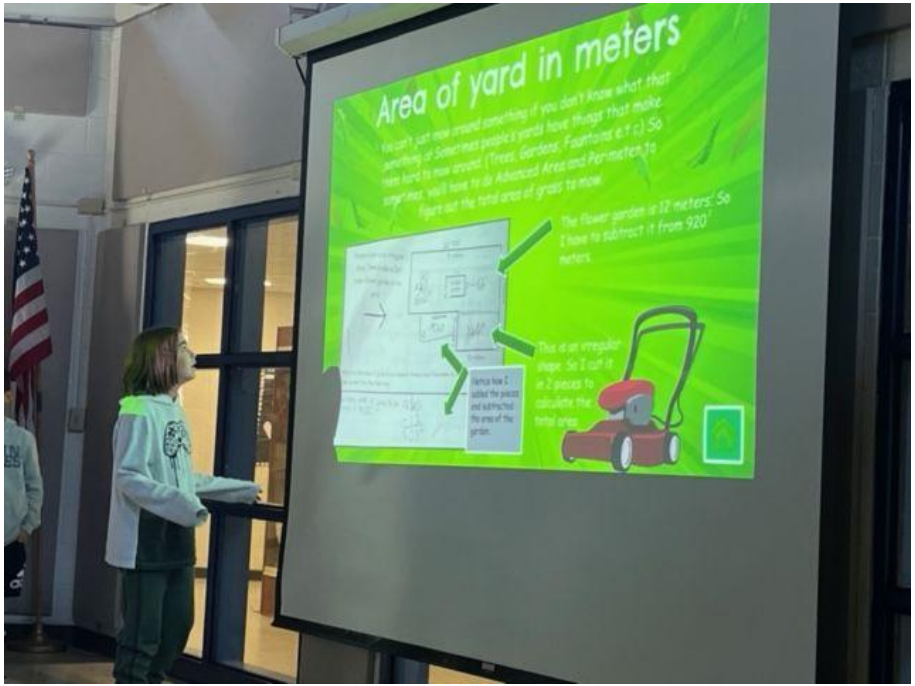
If they score a 90% or higher they are then compacted out.

Students who are compacted out in grade 5 receive small group work that allows them to apply mastered skills to projects and problem solving tasks.

Curriculum Compacting Data

Unit	Number of students
1 (Multiplication, Division and Order of Operations)	17
2 (Decimals)	6 (one chose not to be part of the group)

Examples of Student Work



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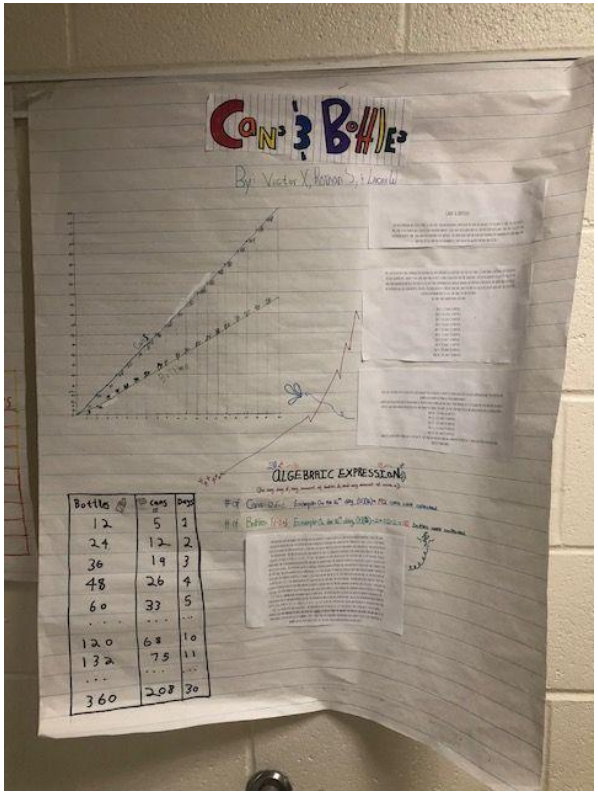
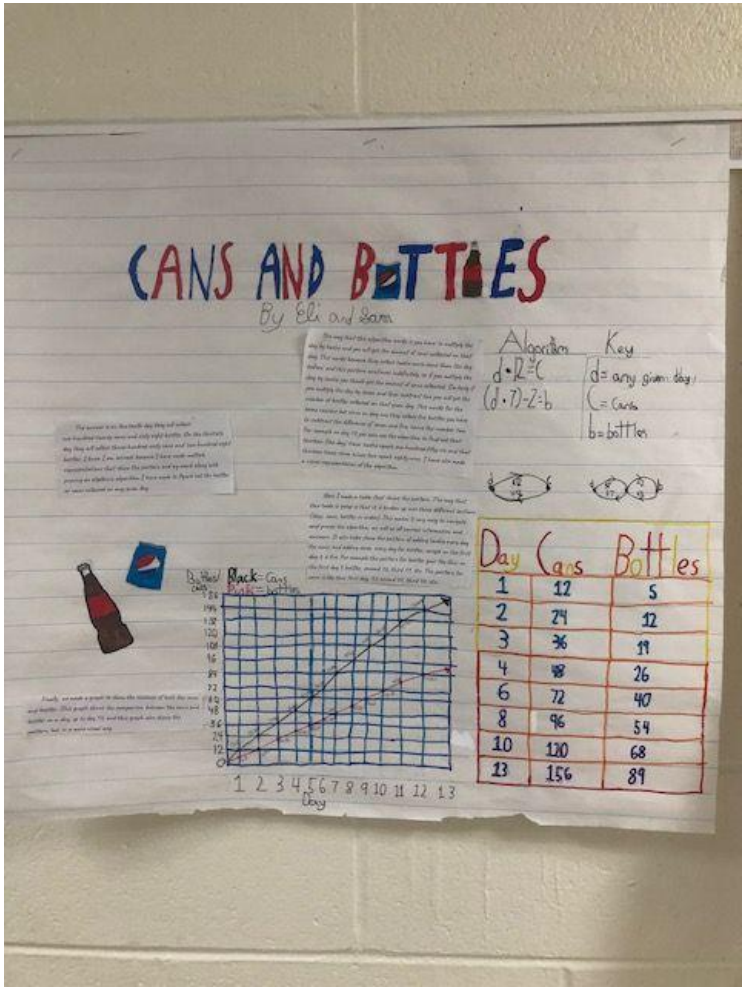




What is Flexible Grouping?

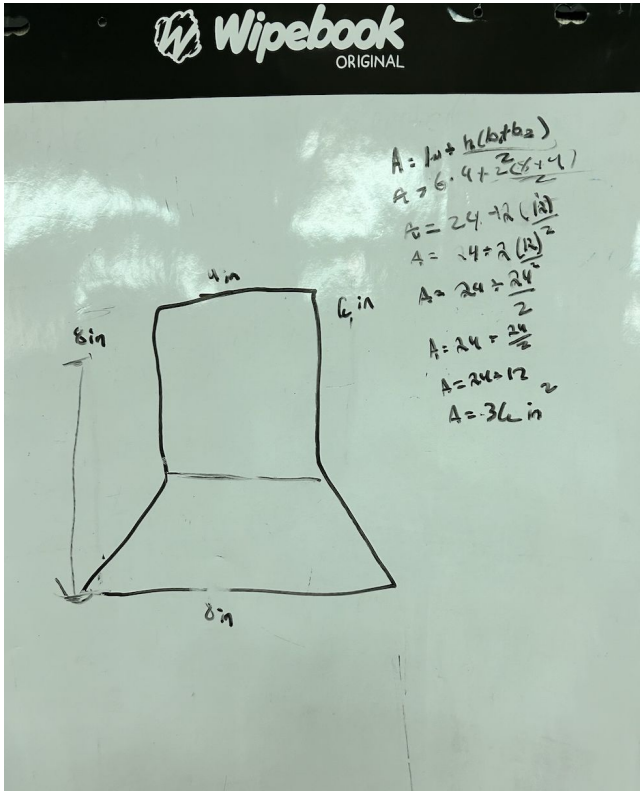
Teachers utilize data to identify students who have mastered concepts and skills.

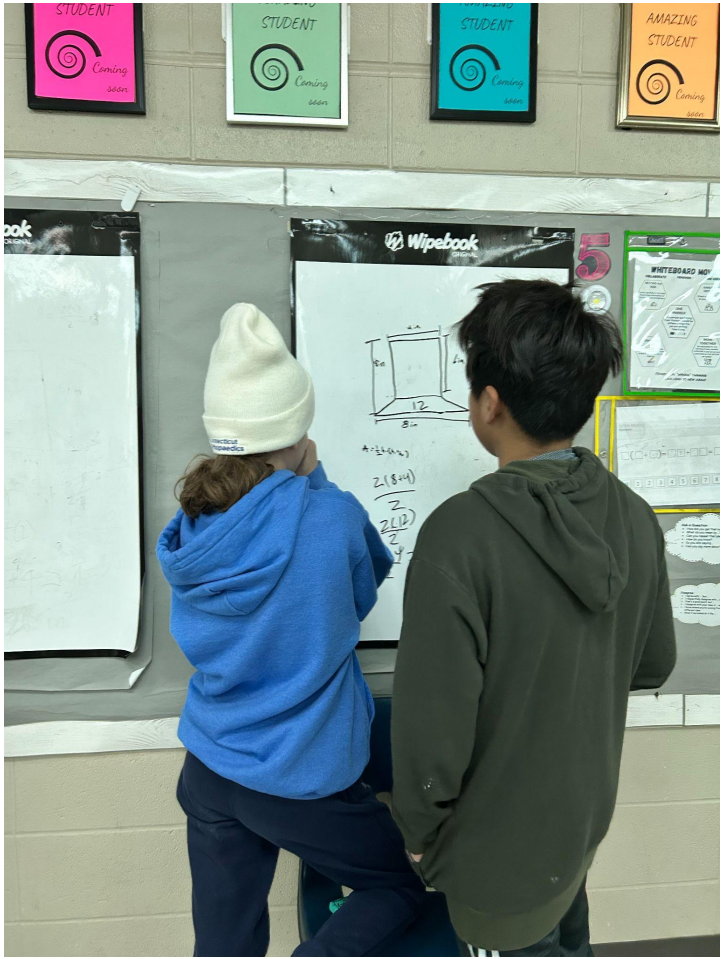
Students are provided with different work to complete during specific class sessions.

Flexible grouping changes each unit.

*This is utilized across many classrooms but most notably in 6th grade.

Examples of Student Work





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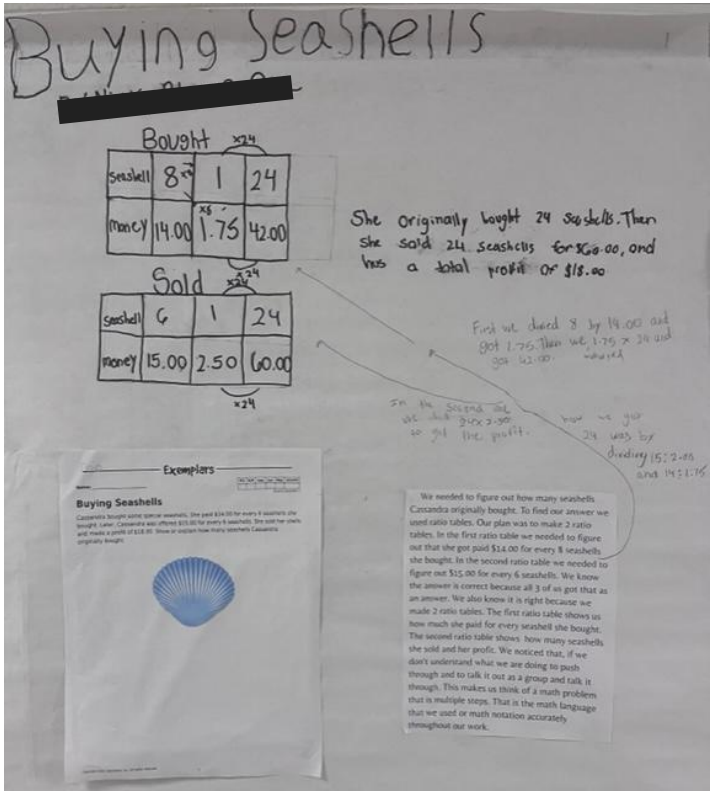

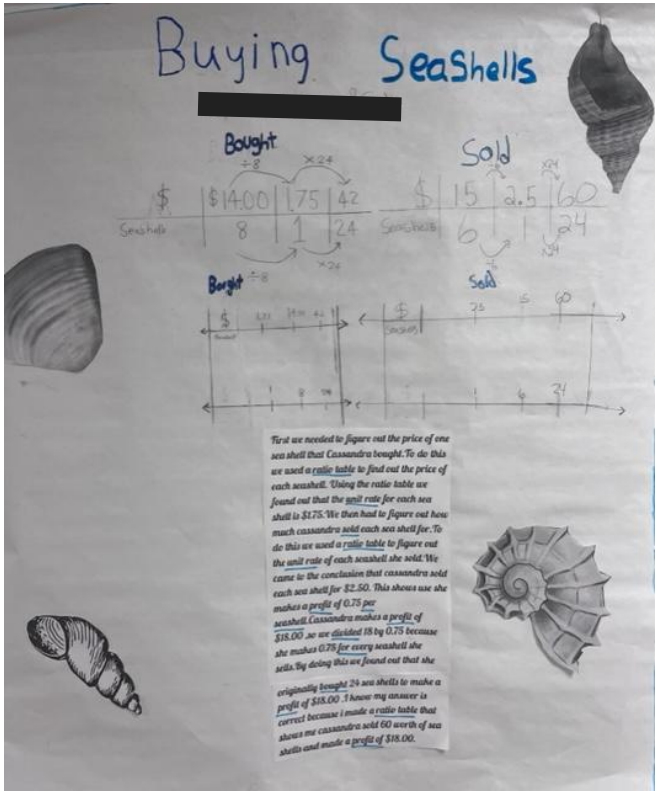

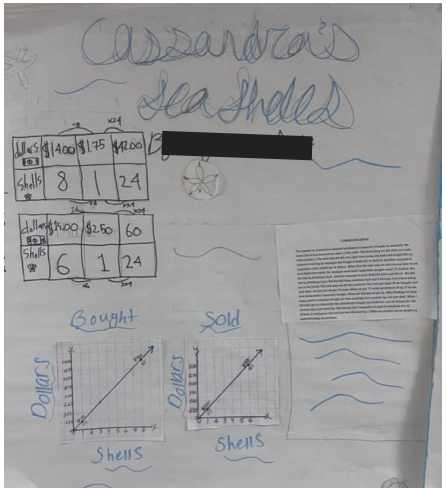

Pre-Algebra

This year:

- Small number of students receive access to online program.
- Math specialist checks in with them regularly.
- Math specialist adjusts online program or provides additional work.

Next year:

- Assessment given to 5th grade students who qualify.
- Pre-algebra will meet every day during 6th grade math block should we have enough students qualify.

Ways we can continue to improve

- Professional development provided to staff to support deepening understanding of grade level standards.
- Exploration of specific resources for mathematicians who qualify for compacting or flexible grouping.
- After school mathematics clubs.
- Ongoing individualized communication.
- Ongoing collaboration with BOWA colleagues.

Sample Communications

Email

Math Unit 1 Test

[redacted]

Students took our unit 1 math test yesterday, and today students conducted an error analysis to fix any errors. For students that had difficulty correcting their answers independently, you will see that I worked with them on the error analysis sheet and/or on an attached sticky note(s). We will continue to review multiplication, division, and order of operations throughout the year, and I will work independently with any student who struggled in those areas. Once you are able to review the test, please sign and return it to school.

Our next unit is computation of decimals. I will continue to provide enrichment activities for those students who are mastering skills at a faster pace. I have several activities available in the classroom and we also have two online activities currently available in Google Classroom (5 is Alive and Open Middle). All of these enrichment activities are available to students at home as well as in school. Please reach out if you have any questions.

[redacted]

5th graders presented some amazing extension projects in math involving calculating revenue, creating a business plan, and advertising. Nice job [redacted] addition to the math involved, students learned other valuable lessons such as working together, meeting deadlines, and using technology effectively. They also had a chance to practice their presentation skills. This Lawn Mower task is now available to all students who'd like to give it a try. Many other students have been working on extension projects including Marcy Cook Tiles, math puzzles, and CMLs. Remember to ask your child how they are challenging themselves in math!

Class Dojo

Questions?