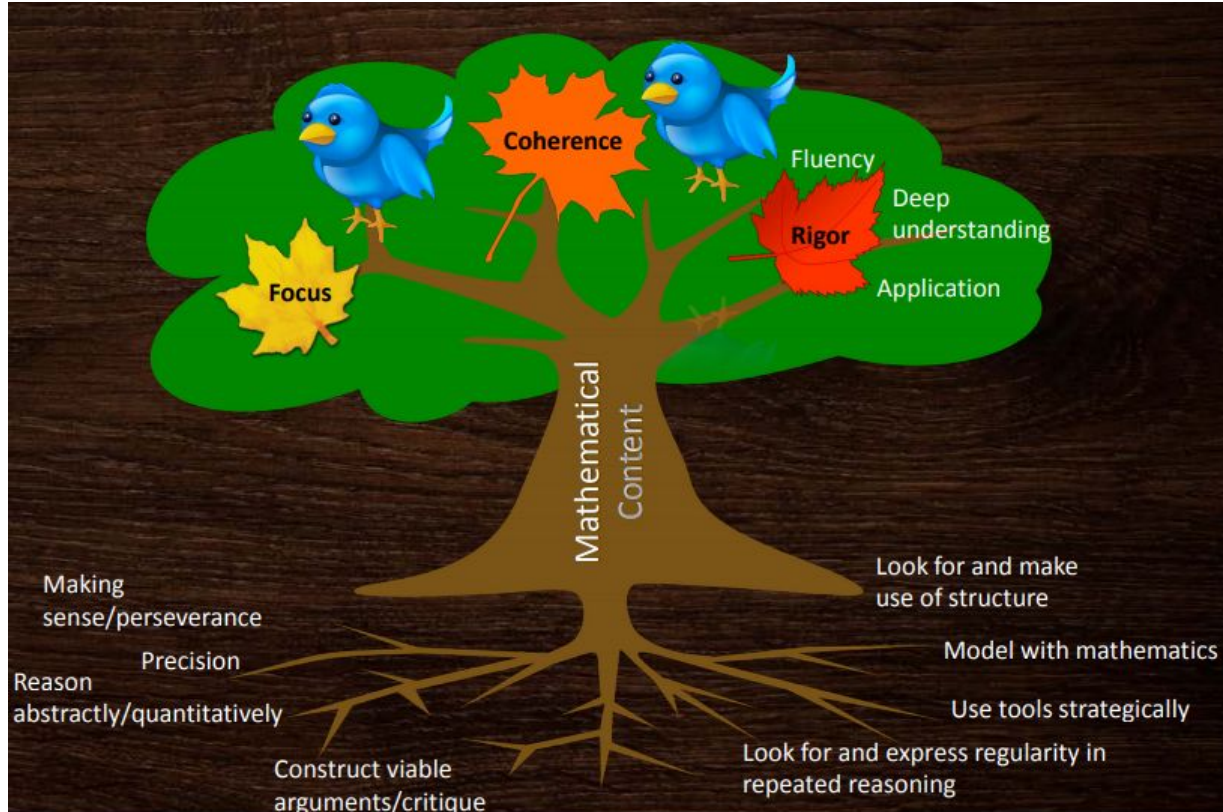


Math Department Curriculum Review Update February 7, 2019

HERRICKS SCHOOL DISTRICT

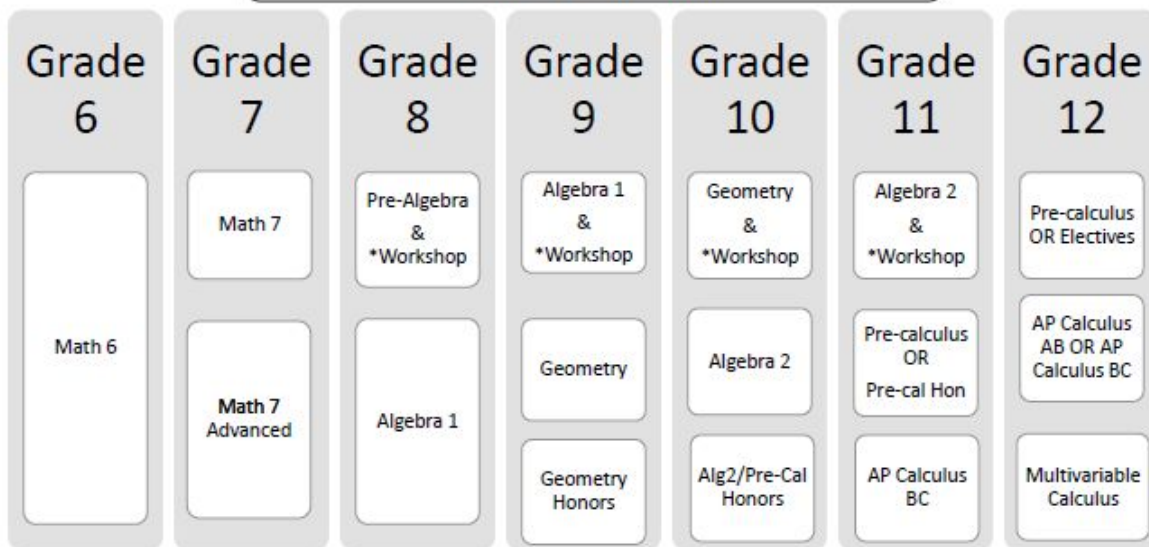
Dr. Geetha Murthy
Mathematics Director K-12

Herricks Math Education Philosophy



MATHEMATICS DEPARTMENT

FLOW CHART 2019-2020**



*Workshop for Math support

** This flow chart is in effect for incoming and current Grade 6 students.

MATH ELECTIVES

Grade 9- Math Research Level 1, Computer Science I, Computer Science II

Grade 10- Math Research Level 2, CS Principles AP, Computer Science I, Computer Science II

Grade 11 and 12- Math Research Level 3, CS Principles AP, Computer Science I, Computer Science II, Computer Science AP, Statistics AP, Topics in Math, College Algebra

What changed and what remained the same?

Same...

- Two years of acceleration is still an option for students in the Math program 6-12
- Multivariable calculus is the highest math course
- Students are provided with rigorous, challenging curriculum at all levels

Changes...

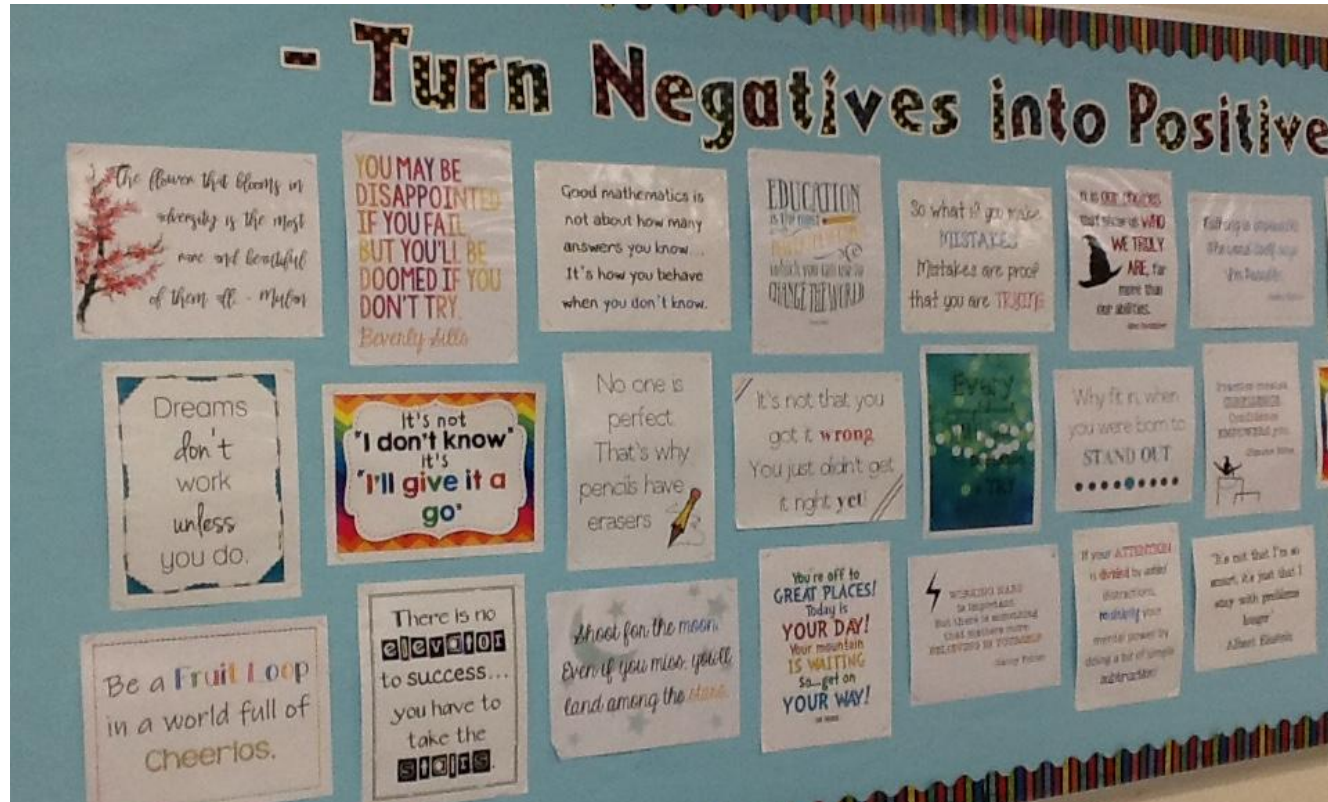
- All students in Grade 6 are grouped heterogeneously
- Acceleration begins in grade 7; double acceleration option at the high school level
- Flexibility in movement from advanced Math 7 to Math 7 and vice versa
- Students/ parents decide in HS about math pathways
- More options available for advanced coursework at the high school level

Grade 6 Math

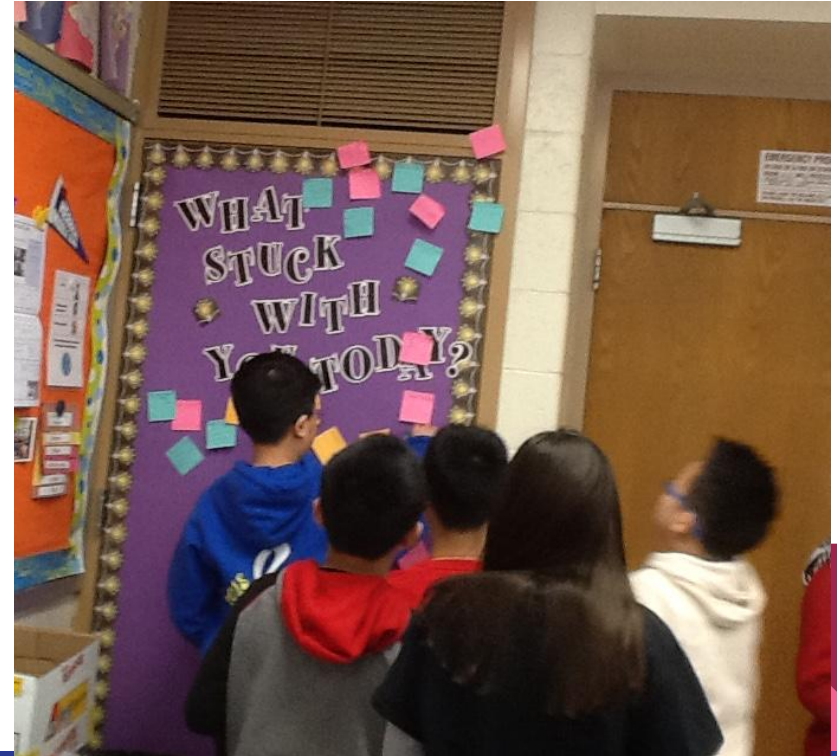
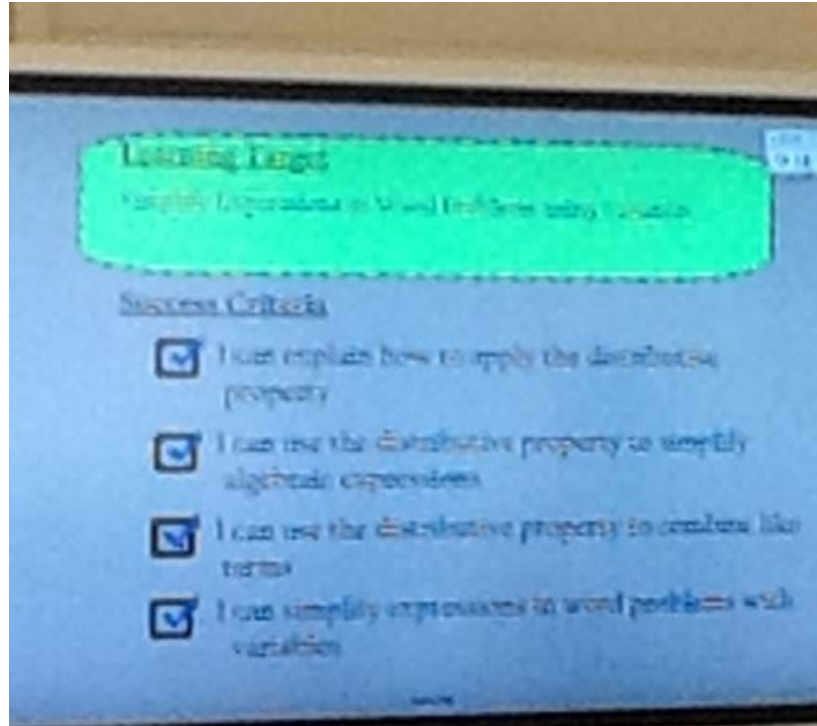
- Growth mindset
- Differentiation strategies
- New Math program being piloted: *Big Ideas Math: Modeling Real Life*
- Collaboration and vertical articulation
- Math clubs and competitions



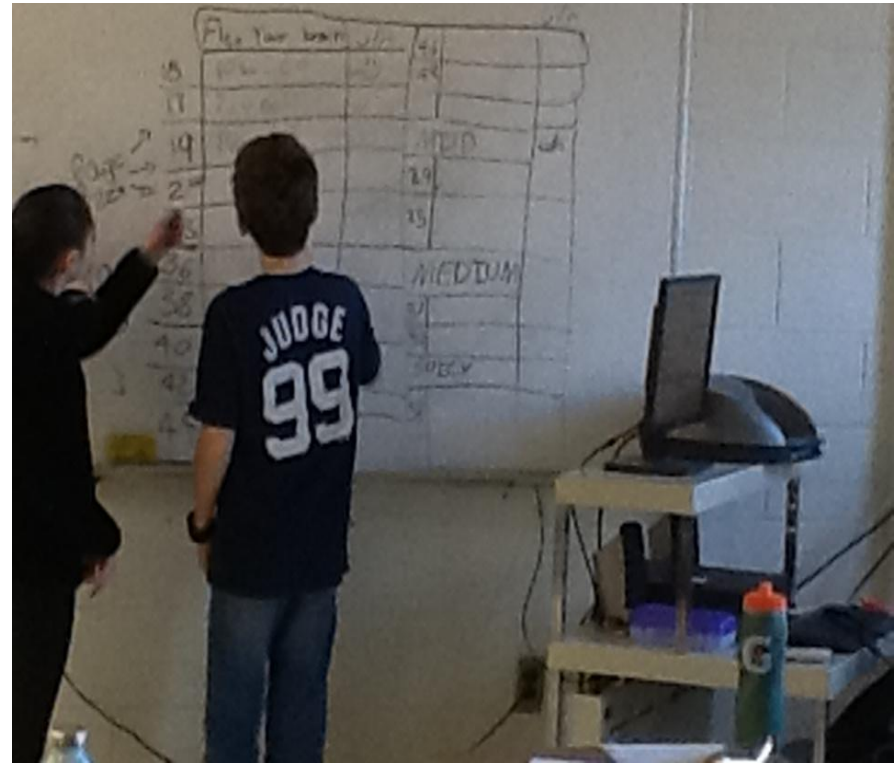
Growth mindset



Math lesson in Grade 6



A photograph showing three students sitting around a dark wooden table in a classroom. The student on the left is a girl with dark hair tied back, wearing a light blue long-sleeved shirt, looking down at her work. The student in the middle is a girl with glasses and brown hair in a ponytail, wearing a grey hoodie, looking towards the right. The student on the right has dark hair and is wearing a purple hoodie, seen from the back. On the table are several open textbooks, loose papers, and a colorful marker. The background consists of white cinder block walls with some papers pinned to them.



FLEX your **brain**

Page 225 #15-23

•ODD•

Page 226 #36-48

•EVEN•

Do as many as you need!

STRETCH your **brain**

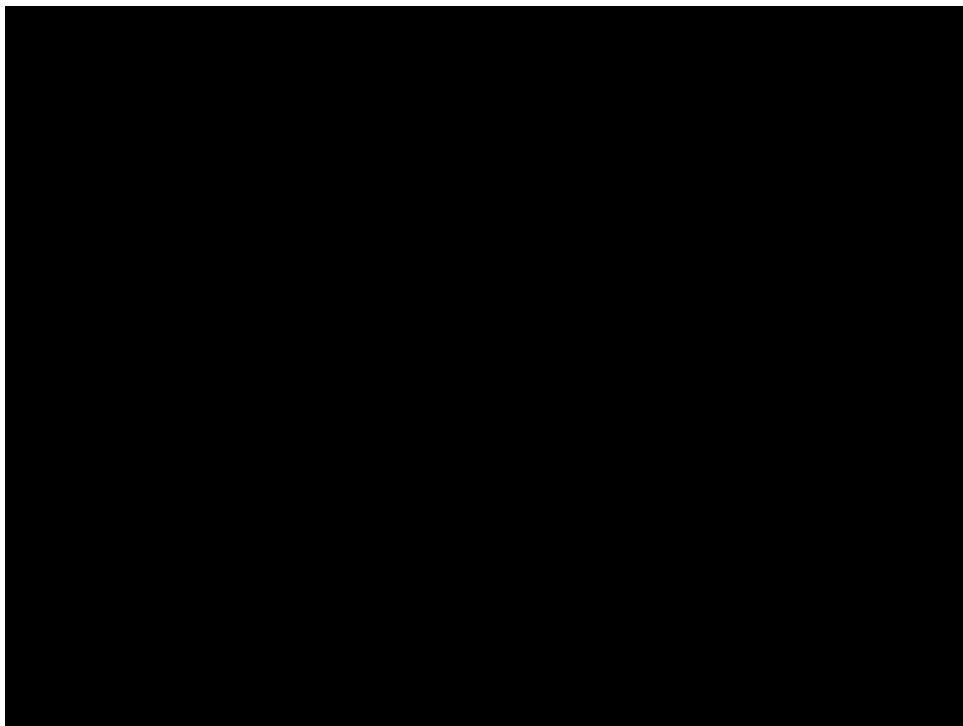
 **MILD:** 34, 35

 **MEDIUM:** 51, 52

 **SPICY:** 53

DIDN'T GET TO YESTERDAY'S  ? Page 236 #23

A Flipped lesson in Math 6



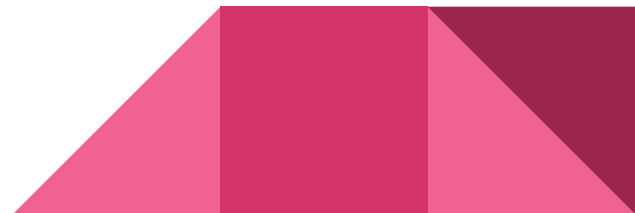
Math Competitions & STEAM events



Grade 7 advanced

Preparation for implementation in 2019-2020

- Curriculum work - Alignment to Next Generation Learning Standards and Big Ideas Learning- Accelerated Math program
- Vertical Articulation
- Scheduling
- Co-teaching
- Math 7 Lab



HS math courses for College Credit

Exploring opportunities for partnerships with local Universities for students to take Math courses for College Credit

- College Algebra
- College Statistics
- College Calculus



Implementation Timeline

2017-18	Curriculum Revisions Teacher preparation and professional development	✓
2018-19	All students in grade 6 are heterogeneously grouped Complex teaching and enriched curriculum. Curriculum work for Advanced Math 7	✓
2019-20	Math 7 advanced will be offered to 80-85 % of students Compacted curriculum from math 7 and 8 standards	
2020-21	Algebra 1 will be offered to 80-85 % of grade 8 students Compacted grade 8 math and Algebra 1 curriculum. 1st year of acceleration. Courses for college credit will be available for students in Grade 11 and 12	
2021-22	Geometry H offered to students who have strong interest and ability in Math. Compacted curriculum includes trigonometry topics.	
2022-23	Algebra 2/Precal H offered for 2nd year of acceleration. Compacted Algebra 2 and precalculus curriculum	

Questions ?

Thank you !

