

English Language Arts & Mathematics

K – 8

Proposed Curriculums

September 16, 2014

Board of Education Meeting

Primary Goals of Curriculum Revisions

Align with the Core State Standards

Create curriculum documents that provide clarity, detail & accountability

Ensure rigor & relevancy for all students



Standards vs. Curriculum

Standards

- Developed at the national or state level
- Expectations for learning written as statements
- Detail the concepts & skills students are expected to know & be able to do
- Do not define remediation or advanced work

Standards vs. Curriculum - continued

Curriculum

- Designed locally
- Specifies what students will learn at each grade level or course
- Specifies the units & pacing of instruction
- Details types of assessments used to determine mastery of the content
- Indicates what primary materials & resources will be used to support teaching & learning

Avon's Use of Core State Standards

Specify what students should know & be able to do at the end of each grade level or course

Are broken out among the units

Are all covered over the course of the year

Only those assessed are listed in the unit

Some are woven through all units

Avon's Curriculum Design

Understandings, essential questions & acquisition of knowledge & skills pull apart & define the standards for Avon

Focused on providing students with a greater depth of knowledge

Skills & understandings applied within the context of the theme

Application of skills in authentic, real world contexts

K – 8 ENGLISH LANGUAGE ARTS

English Language Arts Instructional Shifts

Reading, writing & speaking grounded in evidence from the text, both literary & informational

Intentional experiences and engagement with complex texts and their rich vocabulary

Move from anthology to primary texts

Anchor Standards for Reading

Key Ideas & Details

Craft & Structure

Integration of Knowledge & Ideas

Range of Reading & Level of Text Complexity

Anchor Standards for Writing

Text Types & Purposes

Production & Distribution of Writing

Research to Build & Present Knowledge

Range of Writing

Vision of College & Career Readiness in English Language Arts

Demonstrate independence

Build strong content knowledge

Respond to the varying demands of audience, task, purpose, and discipline

Comprehend as well as critique

Value evidence

Use technology and digital media strategically and capably

Come to understand other perspectives and cultures

K-8 Continuum of Big Ideas (Themes)

Grade	Theme
Kindergarten	All About Me
Grade 1	Seasons and Change
Grade 2	Communities
Grade 3	Connecticut: Past, Present , Future
Grade 4	Regions of the United States
Grade 5	Early History of United States
Grade 6	Exploring the World Through Literature & Life
Grade 7	Growing Up and Surviving
Grade 8	Prejudice and the Understanding of Others

MATHEMATICS



Mathematics Instructional Shifts

Focus: on both procedural skills & fluency as well as conceptual understanding

Coherence: link to major topics within and across grades

Rigor: complex problems that require students to think & revise their models & procedures & persevere

Mathematics Instructional Shifts

K- 5 “unspiraled”

Concepts & skills prioritized by grade level/course

Shift from exposure to mastery

Greater focus on fewer topics

7th grade – Pre-Algebra for all students

8th grade - Algebra I for all students

Standards for Mathematical Practice

1. Make sense of problems & persevere in solving them
2. Reason abstractly & quantitatively
3. Construct viable arguments & critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for & make use of structure
8. Look for & express regularity in repeated reasoning

Mathematical Domains

Learning Progressions across Mathematical Domains

K	1	2	3	4	5	6	7	8	HS	
Counting and Cardinality									Number and Quantity	
Number and Operations in Base Ten						The Number System				Number and Quantity
			Number and Operations: Fractions			Ratios and Proportional Relationships (6 and 7)				
Operations and Algebraic Thinking						Expressions and Equations			Algebra	
								Functions	Functions	
Geometry						Geometry			Geometry	
Measurement and Data						Statistics and Probability			Statistics and Probability	

Areas of Focus

Grade	Key concepts instructed
K – 2	Addition and subtraction, measurement using whole number quantities
3 – 5	Multiplication and division of whole numbers and fractions
6	Ratios and proportional reasoning; early expressions and equations
7	Ratios and proportional reasoning; arithmetic of rational numbers
8	Linear algebra

Flexible Grouping – Grade 6

Students may be moved within & between classes based on performance

Groups have a range of abilities

Students provided with choices to allow them to go as deep as they are willing & capable of doing independently

Movement of Content Standards

Shifting of content standards from grade 8 to grade 7 & 6

Shifting of content standards from grade 7 to grade 6

Honors – Grades 7 & 8

Large percentage of grade level content & skills is similar between both levels

Honors level:

- Problems use more difficult numbers & applications
- A few additional topics are introduced

Additional Honors Topics

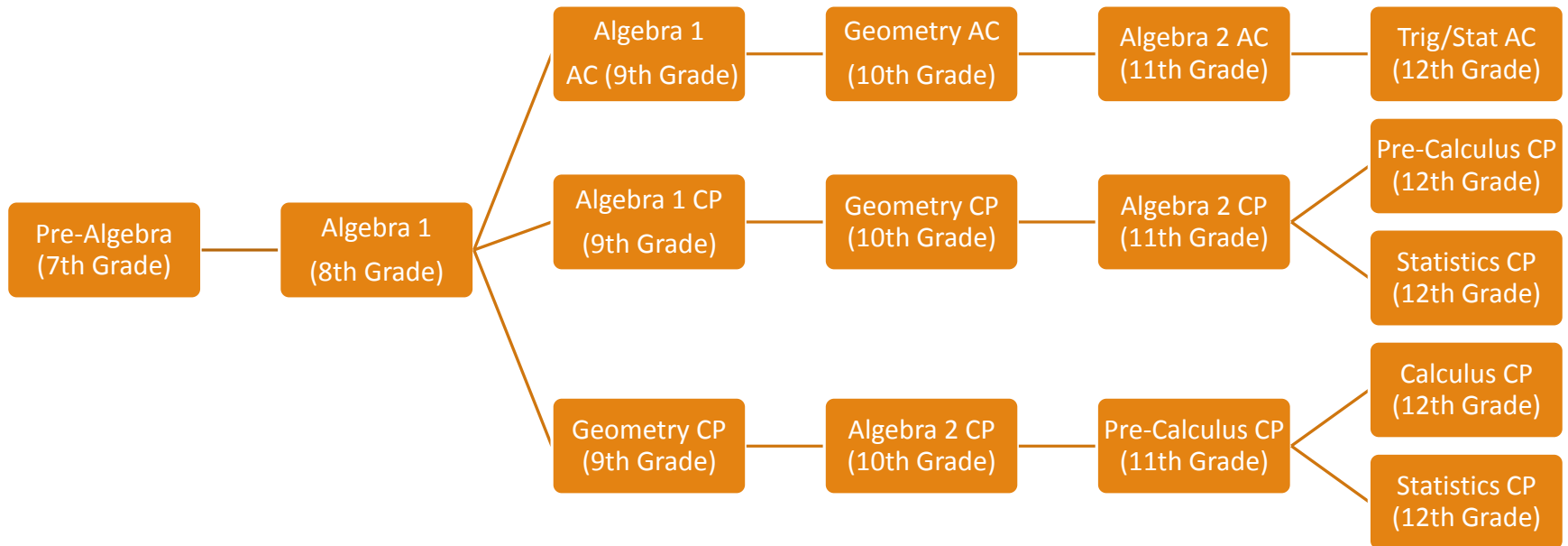
Gr 7:

- Pythagorean theorem and its converse
- transformations
- square numbers

Gr 8:

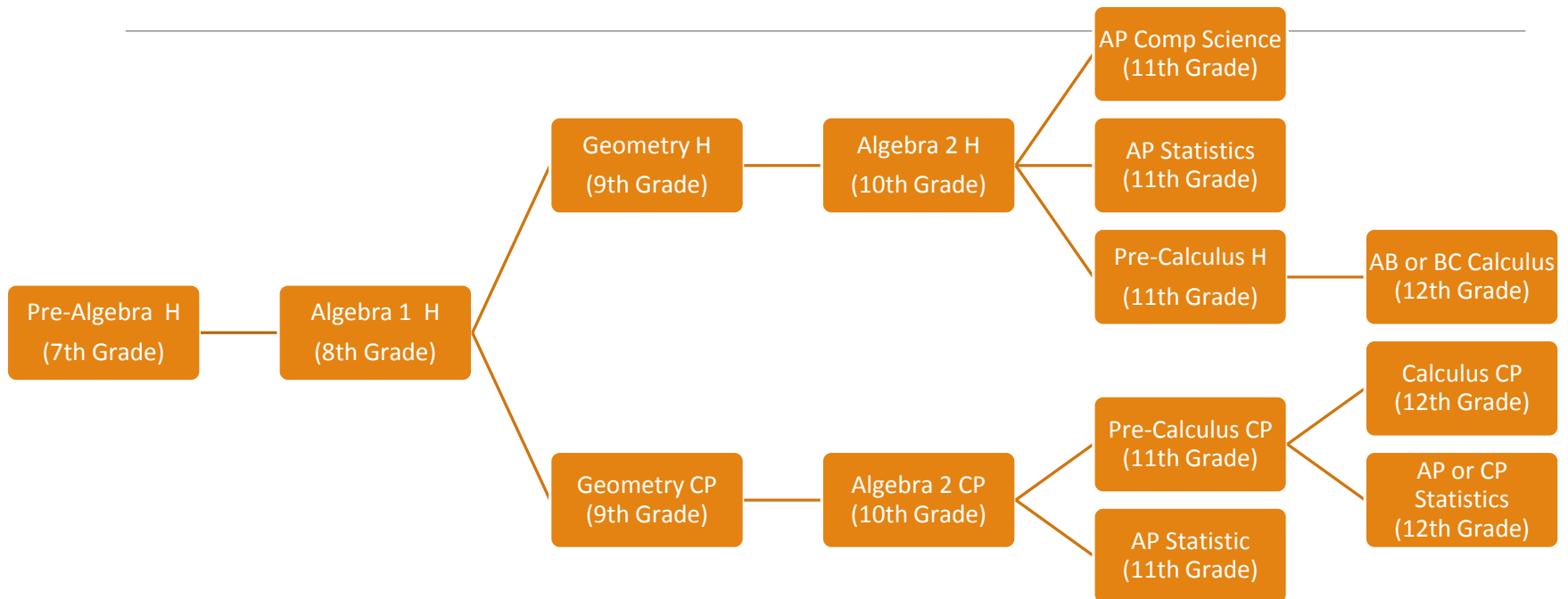
- absolute value equations
- compound inequalities
- absolute value inequalities
- rationalizing the denominator using the conjugate

Typical Math Progression 1 - Standard



****Statistics may be taken in conjunction with a Pre-Calculus or Calculus Course.**

Typical Math Progression 2 - Honors



****Statistics and AP Computer Science may be taken in conjunction with a Pre-Calculus or Calculus Course.**

Next Steps

Continue fine tuning lesson plans & assessments

Need to flex a few units over next couple of years to address overlaps & gaps resulting from previous curriculum

Place both content areas on next BOE agenda for approval