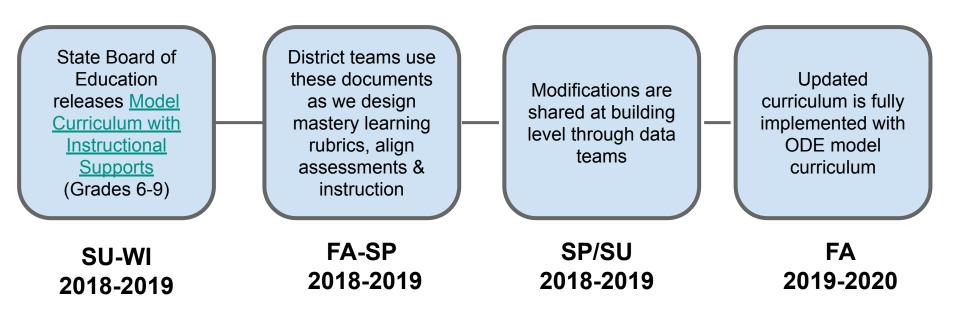
# Hilliard City School District

Mathematics 2018-2019

### Timeline

District and building level District and State Board of teams understand building level Education the updates to teams update Updated standards approves <u>updates</u> standards and resources to are fully to Mathematics supporting reflect changes implemented documents and Standards and plan implementation determine any changes needed SP WI SP/SU FA/WI 2017-2018 2016-2017 2016-2017 2017-2018

### Timeline (con't)



### Preparing our Students for Tomorrow

### Grade Level AND Mathematical Practice Standards

#### KINDERGARTEN OVERVIEW

#### COUNTING AND CARDINALITY

- Know number names and the count sequence.
- Count to tell the number of objects.
- Compare numbers.

#### OPERATIONS AND ALGEBRAIC THINKING

 Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

#### NUMBER AND OPERATIONS IN BASE TEN

 Work with numbers 11–19 to gain foundations for place value.

#### MEASUREMENT AND DATA

- Identify, describe, and compare measurable attributes.
- Classify objects and count the number of objects in each category.

#### **GEOMETRY**

- Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
- Describe, compare, create, and compose shapes.

#### MATHEMATICAL PRACTICES

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

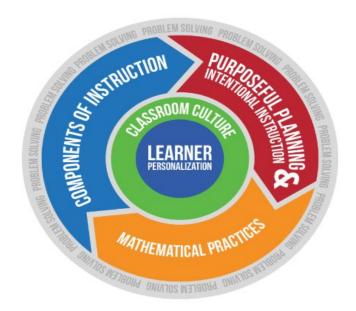
### Elementary Math Framework

During the transition period, a coaching/teacher team updated our math framework, district units, and assessments.

### What is a Math Framework?

- Our math framework gives a clear picture of what we value for teaching and learning for mathematics.
- The framework is the "how" of our mathematics teaching and learning
- The standards are the "what" of our mathematics teaching and learning
- Framework details are based upon research from:
  - "Principles to Actions: ensuring Mathematical Success for All" (NCTM, 2014)
  - "Mathematical Mindsets" (Boaler, Jo 2016)
- We transitioned our <u>Elementary Math Curriculum Course</u> to Canvas

## Elementary Math Framework



A video was created to explain the purpose and details of our updated framework. Each building math coach delivered this message during a building level professional development.

## Secondary Math - Course Changes

Honors Math 6

PreAlgebra changed to Accelerated Math 7

Senior Algebra 2/Business Course

## Secondary Math - Mastery Learning Rubrics

District teams
design Mastery
Rubrics for each of
their instructional
units over the
course of a year

Common
assessments are
updated to reflect
levels of mastery
learning

Continue to hone Mastery Rubrics

Learning
resources and
instruction are
aligned to levels of
mastery to support
individual student
growth

Full District
Implementation to
facilitate learner
agency and
provide authentic
learning
opportunities

Phase 1

Phase 2

Phase 3

Phase 4

## Elementary → Secondary Connections

June Bootcamp for Students

Summer Academy Course being offered for teachers, grades 3-8

### Hilliard University

5th to 6th Grade Transitions
Fraction - Learning Progressions
Teaching Geometry Concepts for Deeper Learning
Through Van Hiele Levels