

## 2020-2021 SCOPE & SEQUENCE RECOMMENDED ADJUSTMENTS

### 8<sup>th</sup> Grade Mathematics

The purpose of this document is to support teachers and leaders in making adjustments to the Fishtank Math Curriculum for the 2020-2021 school year. In developing the guidelines, we consulted Student Achievement Partner's [2020-21 Priority Instructional Content in English Language Arts/Literacy and Mathematics](#) as well as incorporated knowledge of the progressions of mathematical content as they unfold in the Fishtank Math Curriculum. The recommendations aim to identify opportunities where additional, targeted remediation can occur, while ensuring a deep focus on grade-level content. We recognize that while the remote learning experience of this past spring has undoubtedly varied from student to student, this pandemic has magnified many existing inequities in educational access and opportunity. Our guidance for curricular adjustments aims to preserve deep engagement with grade-level content which we believe is critical for equitable instruction for all students.

Knowing that additional time will be needed to address unfinished learning and that pacing will be important, the guidance in this document serves to:

1. Highlight critical grade-level content that should be prioritized,
2. Identify opportunities where lessons can be reduced, combined, or eliminated in ways that will minimize negative impact on student progress and preserve grade-level priorities, and
3. Identify specific places where strong connections to prior grade-level work are beneficial to diagnose and integrate into the curriculum.

These guidelines are not designed as strict instructions on how to adjust the curriculum. Rather, they are meant to support teachers in making the curricular decisions that are right for their students. In particular, this resource provides some guidance around incorporating prior grade-level work based on "just-in-time" content connections, but it does not specify how deep to go into that work or how long to spend on it, as that type of diagnosis and planning will be most effective at the individual level. As noted in the document, our Pre-Unit Assessments, available to Fishtank Plus users, is one resource that can support this diagnosis and curriculum integration. Teachers can also create their own diagnostic assessments using the standard connections mentioned in this resource as well as the foundational standards indicated on the unit page for each unit.

## Unit 1 Exponents and Scientific Notation

Time spent on instruction and practice for 8.EE.A.1 should not be reduced. The Pre-Unit assessment may be valuable in identifying specific prior grade-level work to incorporate into the unit. Lessons and practice on cube roots and computing with scientific notation can be eliminated as suggested below.

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Review of Exponents	8.EE.A	This topic reviews 6.EE.A.1; it may be eliminated if not needed.
B: Properties of Exponents	8.EE.A	Do not eliminate or consolidate lessons.
C: Scientific Notation	8.EE.A	Eliminate Lessons 13-15; focus on real-world application of exponents in form of scientific notation.

## Unit 2 Solving One-Variable Equations

The Pre-Unit assessment may be valuable in identifying specific prior grade-level work to incorporate into the unit.

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Simplifying Expressions and Verifying Solutions	8.EE.C	This topic reviews 7.EE.A.1 and 7.EE.B.4; as needed incorporate additional foundational work in this topic (see Grade 7 Unit 3 Topic B and Grade 7 Unit 4 Topic A).
B: Analyzing and Solving Equations in One Variable	8.EE.C	Do not eliminate or consolidate lessons.
C: Analyzing and Solving Inequalities in One Variable	A.REI.B	This topic and its lessons can be eliminated.

## Unit 3 Transformations and Angle Relationships

Though this unit covers major work of the grade, some lessons may be combined to address key concepts in congruence and similarity and to allow time for other priority content, as suggested below.

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Congruence and Rigid Transformations	8.G.A	Eliminate Lesson 1. Combine Lessons 2 & 3. Combine Lessons 4 & 5. Combine Lessons 7 & 8.
B: Similarity and Dilations	8.G.A	Combine Lessons 11 & 12. Combine Lessons 15 & 16.

C: Angle Relationships      8.G.A      Combine Lessons 17 & 18.  
Combine Lessons 20 & 21.

## Unit 4      Functions

Time spent on instruction and practice should not be reduced. The Pre-Unit assessment may be valuable in identifying specific prior grade-level work to incorporate into the unit.

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Defining Functions	8.F.A	Do not eliminate or consolidate lessons.
B: Representing and Interpreting Functions	8.F.A 8.F.B	Do not eliminate or consolidate lessons.
C: Comparing Functions	8.F.A	Do not eliminate or consolidate lessons.
D: Describing and Drawing Graphs of Functions	8.F.B	Do not eliminate or consolidate lessons.

## Unit 5      Linear Relationships

Time spent on instruction and practice should not be reduced. The Pre-Unit assessment may be valuable in identifying specific prior grade-level work to incorporate into the unit.

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Comparing Proportional Relationships	8.EE.B	Incorporate foundational work from 7.RP.A before starting this topic (see Grade 7 Unit 1 Topic C). Do not eliminate or consolidate lessons.
B: Slope and Graphing Linear Equations	8.EE.B 8.F.A 8.F.B	Do not eliminate or consolidate lessons.
C: Writing Linear Equations	8.EE.B 8.F.A 8.F.B	Do not eliminate or consolidate lessons.

## Unit 6      Systems of Linear Equations

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Solve Systems of Equations Graphically	8.EE.C	Do not eliminate or consolidate lessons.
B: Solve Systems of Equations Algebraically	8.EE.C	Limit amount of time spent solving systems algebraically: Combine Lessons 6 & 7. Combine Lessons 8 & 9.

**Unit 7**
**Pythagorean Theorem and Volume Applications**

Emphasize focus on applying the Pythagorean Theorem to solve real-world and mathematical problems; incorporate work on square roots into the Pythagorean Theorem. Reduce or eliminate additional time in this unit as suggested below.

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Irrational Numbers and Square Roots	8.EE.A 8.NS.A	Combine Lessons 2 & 3. Combine Lessons 4 & 5.
B: Pythagorean Theorem	8.G.B	Eliminate Lessons 7-8. Eliminate Lesson 12.
C: Volume and Cube Roots	8.EE.A 8.NS.A 8.G.C	Eliminate Lesson 13. Combine Lessons 14 & 15, with an emphasis on cylinders.

**Unit 8**
**Bivariate Data**

Focus on using linear functions to model associations in bivariate measurement data; limit the amount of required student practice.

<i>Topics</i>	<i>Cluster(s)</i>	<i>Recommendations</i>
A: Associations in Bivariate Numerical Data	8.SP.A	Focus of unit should be on 8.SP.A.3; if needed to allow for this focus: Combine Lessons 1 & 2. Combine Lessons 3 & 4.
B: Associations in Bivariate Categorical Data	8.SP.A	Eliminate Lesson 9.