



Preparing Students for Success - STAAR 2023

Building Mathematical Knowledge

Throughout Eureka Math lessons students will build deep understanding of math concepts, evaluate their own thinking and that of their classmates, and learn to apply what they've learned in new problem solving situations. This will prepare students to be successful on the end of year assessment when they are required to apply their math knowledge to various problem solving situations.

Phases of Learning

Surface learning phase: the initiation to new ideas. It begins with development of conceptual understanding, and then, at the right time, labels and procedures are explicitly introduced to give structure to concepts. (Hattie, Fisher, Frey, Gojak, Moore, and Mellman, 2017, pg. 29)

Deep learning phase: Deep learning is about consolidating understanding of mathematical concepts and procedures and making deeper connections among ideas. (Hattie, Fisher, Frey, Gojak, Moore, and Mellman, 2017, pg. 30)

Transfer phase: The phase of learning in which students take the reins of their own learning and are able to apply their thinking to new contexts and situations. (Hattie, Fisher, Frey, Gojak, Moore, and Mellman, 2017, pg. 31)

Tying all this together is clarity about learning outcomes and success criteria, on the part of both teachers and students. (Hattie, Fisher, Frey, Gojak, Moore, and Mellman, 2017, pg. 35)

STAAR Prep

- Using the curriculum with fidelity will empower students to build knowledge and use that knowledge to answer questions on assessments
- Using Math Discourse in daily lessons will allow students to construct viable arguments and reason about answers.
- Using the RDW process consistently will help students make sense of problems.
- Using data from exit tickets, mid-module assessments, and end-of-module assessments to plan, analyze, and adjust upcoming lessons to incorporate specific skills and concepts that students still need to practice will close gaps and increase student achievement.
- Using Affirm will give students access and practice to different types of questions. (Drag and drop, multiple choice, open ended, etc)
- Using STAAR released test questions provided by the state will allow students to practice various types of questions that may be included on the end of year assessment.

References:

Hattie, J., Fisher, D., Frey, N., Gojak, L., Moore, S., Mellman W. (2017) *Visible Learning for Mathematics: What Works Best to Optimize Student Learning*. Thousand Oaks, California: Corwin Publishing Company.

Eureka Math 4th Grade STAAR Review Activities

Throughout Eureka Math TEKS lessons, students build a deep understanding of math concepts, evaluate their thinking and that of their classmates, and apply what they've learned in new problem-solving situations. This will prepare students to succeed on the end-of-year assessment when they must use their math knowledge in various problem-solving situations.

As you plan to review the STAAR test, the chart below can help you identify the most tested concepts and some recommended review activities from the Eureka Math TEKS edition. The recommended review activities focus on the readiness standards since these are the most tested knowledge and skills. Use the fluencies in the weeks leading up to the STAAR to help review and maintain fluency skills. The recommended lessons can be used to review key concepts and strategies or to pull problems for students to practice using the RDW process.

TEKS Cluster	STAAR Questions	Recommended Review Activities
Decimals Readiness 4.2B, 4.4A Supporting 4.2A, 4.2C, 4.2E, 4.2F, 4.2H, 4.3G	4-6 items	Fluencies G4 M1 L5 Place Value (4.2B) G4 M6 L14 Write in Expanded Decimal and Fraction Notation (4.2B) G4 M4 L1 Add and Subtract (4.4A) G4 M6 L18 Add Decimals (4.4A) G4 M6 L18 Subtract Decimals (4.4A) Lessons G4 M1 L16 (4.4A) G4 M6 L14 (4.4A)
Fractions Readiness 4.2G, 4.3D, 4.3E Supporting 4.3A, 4.3B, 4.3C, 4.3F, 4.3G	6-9 items	Fluencies G4 M6 L8 Sprint: Write Fractions and Decimals (4.2G) G4 M6 L12 Convert Fraction Form to Decimal Form (4.2G) G4 M5 L13 Compare Fractions (4.3D) G4 M5 L15 Compare Fractions (4.3D) G4 M5 L24 Compare Fractions (4.3D) G4 M5 L16 Draw Strip Diagrams (4.3E) Lessons G4 M5 L18 (4.3E)
Whole Number Operations Readiness 4.4H, 4.5A, 4.5B Supporting 4.2D, 4.4B, 4.4C, 4.4D, 4.4E, 4.4F, 4.4G	7-9 items	Fluencies G4 M3 L12 Multiply in Three Different Ways (4.4D) G4 M5 L12 Divide 3 Different Ways (4.4E, 4.4F) G4 M7 L16 Use the Rule (4.5B) G4 M7 L17 What's the Rule? (4.5B) Lessons G4 M1 L18 (4.5A) G4 M3 L13 (4.4H)

TEKS Cluster	STAAR Questions	Recommended Review Activities
Geometry Readiness 4.6D, 4.7C Supporting 4.6A, 4.6B, 4.6C, 4.7D, 4.7E	5-6 items	Fluencies G4 M4 L16 Classify the Quadrilateral (4.6D) G4 M4 L8 Physiometry (4.7C) Lessons G4 M4 L14-15 (4.6D) G4 M4 L7 (4.7C)
Measurement Readiness 4.5D, 4.8C Supporting 4.8A, 4.8B	4-5 items	Fluencies G4 M3 L4 Find the Area and Perimeter (4.5D) Lessons G4 M3 L3 (4.5C) G4 M7 L10-11 (4.8C)
Data Analysis Readiness 4.9A Supporting 4.9B	2-3 items	Lessons G4 M7 L17 (4.9A)
Personal Financial Literacy Readiness Supporting	1-2 items	Lessons G4 M6 L18 (4.10B)
	32 items 19-21 Readiness Standards 11-13 Supporting Standards	