

Eureka Math

Frequently Asked Questions

How is fluency practiced? Fluency is designed to promote automaticity by engaging students in practice in ways that get their adrenaline flowing. Automaticity is critical so that students avoid using up too many of their attention resources with lower-level skills when they are addressing higher-level problems. The automaticity prepares students with the computational foundation to enable deep understanding in flexible ways.

How much fluency is included in *instruction*? Teachers typically include 10 minutes of daily fluency work. It is generally high-paced and energetic, celebrating improvement and focusing on recognizing patterns and connections within the material. Early in the year, we want students to see their skills grow significantly on both the individual and class levels. Like opening a basketball practice with team drills and exercises, both personal and group improvements are exciting and prepare the players for application in the game setting.

What is a Sprint? Sprints are an essential fluency component of our curriculum. They are differentiated fluency activities with intentionally patterned sequences that move from simple to complex. This patterned repetition provides student practice in a unique drill. Students often love sprints because they simulate a race and help build adrenaline and confidence in students as they obtain their personal best.

What are “Application Problems?” *Our instruction* is designed to help students understand how to choose and apply the correct mathematics concept to solve real world problems. To achieve this, lessons use tools and models, problems that cause students to think quantitatively and creatively, and patterns that repeat so frequently that students come to see them as connected to their environment and other disciplines. A range of problems presented within concepts serve multiple purposes: single-step word problems help children to understand the meaning of new ideas, and multi-step word problems support and develop instructional concepts.

What is the goal of “Student Debriefs?” The goal is for students to see and hear multiple perspectives from their classmates and mentally construct a multifaceted image of the concepts being learned. Through questions that help make these connections explicit and dialogue that directly engages students in the Standards for Mathematical Practice, they articulate those observations so that the lesson’s objective becomes eminently clear (in focus) to them.

What is the “Exit Ticket” that is at the end of some lessons? “Exit Tickets” close the Student Debrief component of each lesson. These short, formative (inform our instruction) assessments are meant to provide quick glimpses of the day’s major learning for students and teachers. Through this routine, students grow accustomed to showing accountability for each day’s learning and they produce valuable data for the teacher that becomes an indispensable planning tool.

How do teachers structure a math class to meet the needs of all learners? Teachers differentiate their instruction to meet the needs of a wide range of learners. Many teachers use a math workshop format. There are a variety of ways to set up a math workshop. The workshop may include such components as a fluency warm-up, mini-lesson, guided small group math instruction, math stations or centers, math games and student debrief.

(Adapted from Eureka Math FAQs)