

# Required Fluencies for Grade 5 Math

By the end of Grade 5:

1. Multi-digit multiplication. (Procedural Fluency/**Major Work of Grade 5**)

## What is the role of conceptual understanding when building fluency?

Effective mathematics teaching builds fluency with basic facts and procedures on a foundation of conceptual understanding. Conceptual understanding develops over time by giving students opportunities to look at math concepts through multiple perspectives, gain an understanding of why and how the math concept works, and understand when to use the math concept. A rush to fluency can undermine student confidence and interest in mathematics.

## What does it mean to be fluent?

- A student is demonstrating procedural fluency, if they demonstrate the following characteristics:
  - Efficiency - The student selects an appropriate strategy for the problem and solves the problem in a reasonable amount of time.
  - Flexibility - The student applies a strategy to a new problem type and trades out or adapts the strategy, as needed.
  - Accuracy - The student gets the correct answer and completes steps accurately.

## When is multi-digit multiplication taught in Eureka Math Squared?

- Module 1

## Considerations for building fluency:

- What opportunities exist within the Fluency section of lessons in modules 1 through 6 to move students toward this required fluency?
- What opportunities can be provided during small group instruction to move students toward this required fluency?
- What opportunities for distributed practice can be provided?

Sources:

Bay-Williams, J. and Kling, G. (2019). *Math Fact Fluency*. ASCD/NCTM.

NCTM. (2014). *Principles to Actions: Ensuring Mathematical Success for All*. The National Council of Teachers of Mathematics.

Student Achievement Partners. (n.d.). *CCSS Where to Focus Grade 5 Mathematics*. Achieve the Core.  
<https://achievethecore.org/category/774/mathematics-focus-by-grade-level>