

## EMTP 6 - Build Procedural Fluency from Conceptual Understanding

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- 1 EMTP 6- Build procedural fluency from conceptual understanding.
- 2 Procedural fluency in mathematics is more than memorizing steps—it's about understanding,
- 3 flexibility, and the application of knowledge. Effective teaching of mathematics builds fluency with
- 4 procedures on a foundation of conceptual understanding so that students, over time, become skillful
- 5 in using procedures flexibly as they solve contextual and calculative problems.
- 6 Fluency builds upon a foundation of conceptual understanding. When students grasp the why
- <sup>7</sup> behind mathematical procedures, they can use them more effectively and confidently.
- 8 In Principles to Actions, the authors describe how 'Fluency builds from initial exploration and
- 9 discussion of number concepts to using informal reasoning strategies based on meanings and
- 10 properties of the operations to the eventual use of general methods as tools in solving problems."
- 11 Procedural fluency is a journey—built over time, rooted in understanding, and shaped by practice.
- 12 Over time, students develop the ability to choose flexibly among methods to solve problems. This
- 13 flexibility is a hallmark of fluency. As students become fluent, they gain the tools to tackle any
- 14 problem with confidence and precision.

