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Curriculum Units by Fellows of the National Initiative

2023 Volume III: Transitions in the Conception of Number: From Whole Numbers to Rational Numbers to Algebra

A Framework for Problem Solving: Schema Development and Discourse

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This is a curriculum unit designed to work with Eureka Math. The framework uses mathematical discourse as students collaborate to create word problems for a given scenario. Then students use the collection of word problems they created and solve them with tape diagrams. Next, they categorize the problems to identify schemas based on the number of steps and the operations. Connections are made between the tape diagrams and the solutions. All the NCTM Process Standards are incorporated throughout the unit. The curriculum unit is designed for grade 4 students but could easily be adapted for grades 1-6.

(Developed for Mathematics, grade 4; recommended for Mathematics, grades 2-6)

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