



Curriculum Units by Fellows of the National Initiative
2015 Volume V: Problem Solving and the Common Core

Math is All Around Us: Representing and Solving One-Step Addition and Subtraction Word Problems within 20

Guide for Curriculum Unit 15.05.02, published September 2015
by Danyelle Frye-Brulia

This unit concentrates on representing and solving one-step addition and subtraction word problems within 20. It is important that students develop an understanding of the operations of addition and subtraction within the wide range of situations where addition and subtraction can be applied. Students solve problems of 3 types including change problems, part-part-whole problems and comparison problems. These types of problems are further divided according to position of the unknown quantity, resulting in 14 problem types. Instruction emphasizes the use of manipulatives based instruction following the concrete-pictorial-abstract approach. These strategies have been found effective with students with disabilities as well as students experiencing difficulty mastering mathematical concepts at a pace on par with their peers. The intended audience is first-grade. The unit could also be used with kindergarten students that need enrichment or with older students who have not mastered problem solving of addition and subtraction word problems within 20.

(Developed for Elementary Mathematics, grades K-2; recommended for Elementary Mathematics, grades K-2)

<https://teachers.yale.edu>

©2023 by the Yale-New Haven Teachers Institute, Yale University, All Rights Reserved. Yale National Initiative®, Yale-New Haven Teachers Institute®, On Common Ground®, and League of Teachers Institutes® are registered trademarks of Yale University.

For terms of use visit https://teachers.yale.edu/terms_of_use