

research into practice

The Lessons in this module focus on two topics: multiplication basic facts and multiplication word problems (Lessons 6.1 – 6.7) and fraction concepts and models (Lessons 6.8 – 6.12). The first topic is a major thrust of the Grade 3 Stepping Stones program and in these seven lessons the eights, ones, and zeros multiplication facts are systematically introduced and reinforced (Lessons 6.1 – 6.6) and then extended (Lesson 6.7) to solving multiplication word problems. The same developmental sequence that was used in earlier modules for teaching the twos and fours facts is followed in these lessons. Research on basic-facts instruction shows clearly that the sort of systematic development provided in these lessons provides students with a solid conceptual foundation for learning all 100 basic multiplication facts, which in turn will prepare them for future multiplication work involving larger numbers. Lessons 6.8 through 6.12 continue the development of fraction ideas from Module 4 and, like the lessons in Module 4, these lessons are firmly rooted in research that points out the importance of helping students develop an understanding of the relationship between the standard symbolic form for fractions and their pictorial representations (i.e. parts of a whole region or parts of a whole collection). Moreover, as all teachers know, fractions can be a daunting topic for students to learn. One such difficult topic is improper fractions. By presenting this topic using both the number line model (Lesson 6.10) and the area model (Lesson 6.11) students are given two different representations of this elusive notion. The final lesson of the module serves to help students pull together their thinking about what they have learned about fractions thus far.

references

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