

Math Background

Understanding Situations in Story Problems

Throughout the unit, children will see a variety of story problems, which are systematically presented. This research-based focus on story problems gives children a chance to recognize a type of problem by understanding the underlying situation presented. If children truly understand the situation, they will be less likely to perform rote computation steps that do not fit into the problem situation. Rather, they will think about the situation and try to comprehend it, before attempting to solve it.

Talking About Story Problems Children read story problems carefully and rephrase them in their own language. This helps them analyze what information is given and what is being asked. Children discuss the problems with one another and share ideas about the meaning of the situations. They share ideas about how they might solve the problems.

Representing Story Problems Throughout the unit, emphasis is placed on understanding, and then representing any story problem. Children use what they know from reading and talking about the problems to draw representational diagrams, Math Mountains, number boxes, and equations. Children label math drawings to link them to the problem situations and to show their thinking.

Story Problem types Extensive research from all over the world has identified the types of word problems described on the following pages. Children's solutions vary with the type of problem and with which quantity is unknown. Children need experience with all types in order to become good problem solvers.

