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Nota di contenuto	Section One -- What we are about -- Doing mathematics -- Section two -- Place value -- The four rules -- Polygons -- Natural numbers and beyond -- Rational numbers and beyond -- Polyhedra -- Group Theory.
Sommario/riassunto	Long description: Mathematics education research indicates the value of a meaning-making and problem-solving approach to the teaching mathematics in primary and lower secondary classrooms. Yet teachers, most of whom have not experienced such pedagogies in their own mathematics learning, often find it difficult to implement such approaches. Based on over twenty-five years in mathematics preservice education, this book is intended to support preservice tutors and their students in bridging this gap. The book takes six topics from the primary and lower secondary curriculum: place value number systems; the four rules of number; polygons, their properties and their symmetries; natural numbers including factors, multiples, powers and simple number theory; fractions, decimals and irrational numbers; and polyhedra. Each topic is located very briefly in the research literature and its place in or linked to the primary and lower secondary curriculum is discussed. Relevant mathematical activities follow, many of which can transfer directly from the university to the school classroom with very little adaptation. The final topic chapter is rather different. It deals with group theory, an aspect of mathematics which is

related to primary and lower secondary mathematics structurally but not in terms of recognisable content. There is an emphasis throughout on the need to reflect on mathematical experience, to develop sensitivity and self-awareness and to promote an approach to the subject that is creative and inclusive.
