1. Record Nr. UNINA9910795906103321 Autore Spangler David B. **Titolo** Strategies for teaching whole number computation: using error analysis for intervention and assessment // David B. Spangler Thousand Oaks, California: .: Corwin, . [2010] Pubbl/distr/stampa 2010 **ISBN** 1-4522-9634-0 1-4522-9898-X Descrizione fisica 1 online resource (xv, 204 pages): illustrations Collana Gale eBooks Disciplina 372.7/2 Arithmetic - Study and teaching (Elementary) - Activity programs Soggetti Mathematics - Study and teaching (Elementary) - Activity programs Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. ""Cover""; ""Contents""; ""Preface""; ""Acknowledgments""; ""About the Nota di contenuto Author""; ""Chapter 1 - A Look at the Academic Research: Intervention in the Mathematics Classroom""; ""Introduction to the Academic Research""; ""Equity and Quality in the Math Classroom""; ""Student Dispositions""; ""Activating Prior Knowledge""; ""Representations""; ""Estimation and Mental Math""; ""Alternative Algorithms""; ""Differentiating Instruction""; ""Instructional Games""; ""Response to Intervention""; ""Questions for Teacher Reflection""; ""Chapter 2 - Big Ideas in Computation and Problem Solving"" ""The Base-Ten Place-Value System and Multidigit Computation""" Actions and Operations""; ""Questions for Teacher Reflection""; ""Unit 1 - Addition of Whole Numbers""; ""Diagnostic Test""; ""Item Analysis for Diagnostic Test""; ""Error Patterns & Intervention Activities""; ""Practice Exercises""; ""Questions for Teacher Reflection""; ""Unit 2 - Subtraction of Whole Numbers"": ""Diagnostic Test"": ""Item Analysis for Diagnostic Test""; ""Error Patterns & Intervention Activities""; ""Practice Exercises""; ""Questions for Teacher Reflection""; ""Unit 3 - Multiplication of Whole Numbers" ""Diagnostic Test"""Item Analysis for Diagnostic Test""; ""Error Patterns & Intervention Activities""; ""Practice Exercises""; ""Questions for

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""Diagnostic Test""; ""Item Analysis for Diagnostic Test""; ""Error Patterns & Intervention Activities""; ""Practice Exercises""; ""Questions for Teacher Reflection""; ""Resources for Estimation, Instructional Games, and Follow-Up Activities (Blacklines)""; ""Resources for Addition""; ""Follow-Up Activity: Next Number, Please""; ""Roller Coaster Rounding""

""Using Front-End Estimation to Check for Reasonableness: Addition"""
Instructional Game: Keeping Score in Bowling""; ""Resources for
Subtraction""; ""Using Front-End Estimation to Check for
Reasonableness: Subtraction""; ""Instructional Game: Balance the +/a€?
Number Sentence!""; ""Follow-Up Activity: Editor Error Search (+/a€?)"";
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""Instructional Game: How Close Can You Get?""
""Tables for Addition/Subtraction""

Sommario/riassunto

Through error analysis and targeted instruction, you can uncover students' misconceptions in addition, subtraction, multiplication, and division and help students understand and correct their own mistakes!