

Early Numeracy:

A Bibliography of Resources

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Stewart Resources Centre

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*Annotations have been excerpted and/or adapted from descriptions provided by the publishers.

370.117 P899

Pransky, Ken

Beneath the surface : the hidden realities of teaching culturally and linguistically diverse young learners, K-6

Portsmouth, NH: Heinemann, 2008.

Subjects: Critical pedagogy; Early childhood education; Multicultural education.

Summary: The author creates a framework for thinking and strategies for practice that will help you: learn who your culturally and linguistically diverse (CLD) students are on their terms; understand the process of learning in a deeper way, so that your teaching becomes more effective; explicitly support CLD students' acquisition of school-matched English; identify and teach underachieving CLD students the secret skills that are essential for academic success; and help underachieving CLD students succeed in math as well as reading.

371.9 W373

Weber, Chris

RTI in the early grades : intervention strategies for mathematics, literacy, behavior & fine-motor challenges

Bloomington, IN: Solution Tree Press, 2013.

Subjects: Remedial teaching; Response to intervention (Learning disabled children); Learning disabled children—Education; Education—Elementary.

Summary: Teachers and support personnel will discover how to implement RTI-based supports in the early grades and learn what this prevention looks like. Find practical, research-based strategies to seal the gaps in student learning in grades K-3, identify students who need intervention, and more.

372 I59

Carlson, Jerry; Levin, Joel R. (Ed.)

Instructional strategies for improving students' learning : focus on early reading and mathematics

Charlotte, NC: Information Age Pub., 2012.

Subjects: Reading (Elementary); Mathematics—Study and teaching (Elementary).

Summary: The twin objectives of the series *Psychological Perspectives on Contemporary Educational Issues* are: (1) to identify issues in education that are relevant to professional educators and researchers; and (2) to address those issues from research and theory in educational psychology, psychology, and related disciplines. The present volume, consisting of two focal chapters, commentaries, and final responses targets instructional strategies for improving students' learning in two of the traditional "three R" areas, reading and 'rithmetic (mathematics), in the elementary school grades. The present volume is intended for practitioners and researchers who are seeking the latest instructional research-based strategies for improving students' early reading and mathematics performance.

372.21 D261

Davis, Beth R.

Hands-on science and math : fun, fascinating activities for young children

Lewisville, NC: Gryphon House, Inc., 2015.

Subjects: Early childhood education; Creative activities and seat work; Mathematics—Study and teaching (Early childhood); Science—Study and teaching (Early childhood).

Summary: As you incorporate all five senses into learning experiences, you will give little innovators the opportunity to observe and explore the world around them. Designed to work with easy-to-find materials, the *Hands-On Science and Math* activities are inexpensive and uncomplicated, yet they lay the groundwork for understanding more complex STEM concepts later on.

372.21 E96

Exploring math and science in preschool

Washington, DC: National Association for the Education of Young Children, 2015.

Subjects: Mathematics—Study and teaching (Early childhood).

Summary: This book is what every preschool teacher needs. Filled with practical strategies and useful information on math and science, this book offers: learning centre ideas, engaging activities, practical suggestions that are easy to implement, ideas that support the development and learning of every preschooler, and children's book recommendations. This excellent resource of engaging learning experiences for preschoolers was developed by the editors of *Teaching Young Children*.

372.21 M219

Robertson, Kelly (Ed.)

Graphs for little learners. Grades preK-K

Greensboro, NC: Education Centre, 2012.

Subjects: Kindergarten—Activity programs; Education, Preschool—Activity programs; Mathematics—Study and teaching (Preschool); Graphic methods.

Summary: From bar graphs and picture graphs to object graphs and data displays, the activities in this book are perfect ways to enhance early math skills. Grades PreK-K.

372.21 M219

Goren, Ada H.

Numbers for little learners : over 90 simple activities to build number sense throughout the early childhood day

Greensboro, NC: Mailbox; Education Centre, 2006.

Subjects: Counting—Study and teaching (Early childhood); Kindergarten—Activity programs; Education, Preschool—Activity programs.

Summary: This book features more than 75 activities and over 65 pages of reproducible patterns, booklets, and practice pages. These practical tools build core early math skills all the way to 20.

372.21 M426

Rhodes, Immacula (Ed.)

Math picture puzzles for little learners : dozens of age-perfect practice pages that help children build key early math skills

Toronto, ON: Scholastic, 2011.

Subjects: Education, Preschool—Activity programs; Kindergarten—Activity programs; Mathematics—Study and teaching (Preschool).

Summary: Formats such as connect-the-dot puzzles, hidden pictures, and mazes are included. Topics include number recognition, one-to-one correspondence, counting, matching numbers to quantities, addition and subtraction facts to 10.

372.21 N938

Novelli, Joan

Building foundations in math : shapes : hands-on activities, games, interactive reproducibles

Toronto, ON: Scholastic, 2008.

Subjects: Kindergarten—Activity programs; Mathematics—Study and teaching (Early childhood); Shapes—Study and teaching (Early childhood); Education, Preschool—Activity programs.

Summary: These engaging hands-on activities introduce and reinforce concepts about geometric shapes, patterns, symmetry, spatial relationships, and more. This book features reproducible games, movement activities, and literature links to help children learn and understand key concepts, build math vocabulary, problem solve, and connect shapes to their everyday world. This book includes whole-class, small group, and learning center activities.

372.21 P541

Phelps, Pamela C.

Let's build : strong foundations in language, math, and social skills

Lewisville, NC: Gryphon House, Inc., 2012.

Subjects: Language arts (Early childhood) —Activity programs; Blocks (Toys) in mathematics education; Social skills—Study and teaching (Early childhood) —Activity programs; Blocks (Toys); Early childhood education—Activity programs.

Summary: Blocks are a key teaching tool in any early childhood program. Through well-planned, teacher-supported block play experiences, young children can build math, language, and social skills. It includes strategies for creating and scaffolding the block play experience, recommends children's books that support the learning, and outlines ways to match behaviours, content, and concepts to learning standards. Lesson plans are based on ten broad themes including: Large Buildings Around the World, Wild Animals, Ways to Travel, and Our Families and Ourselves.

372.21 P585

Pica, Rae

Jump into math : active learning for preschool children

Beltsville, MD: Gryphon House, 2008.

Subjects: Early childhood education; Mathematics—Study and teaching (Elementary); Education—Preschool.

Summary: The activities in each chapter are organized by level of difficulty, and each one incorporates math experiences with movement. Most activities require few or no materials and include related children's books or music to extend the learning. The math skills index is an invaluable reference tool, giving teachers flexibility to plan around children's interests.

372.21 S765

National Association for the Education of Young Children

Spotlight on young children. Exploring math

Washington, DC: National Association for the Education of Young Children, 2012.

Subjects: Mathematics—Study and teaching (Primary); Child development; Mathematics—Study and teaching (Early childhood); Mathematics—Study and teaching (Preschool).

Summary: In this collection of articles from NAEYC's journal, *Young Children*, teachers of young children (from infancy through age 8) will learn how to help children develop, construct, test, and reflect on their mathematical understandings. Articles offer ways to provide in-depth, engaging learning experiences focusing on key math concept areas: number and operations, geometry, measurement, and data analysis. The book offers a comprehensive resource list and a professional development guide with questions and activities to help readers reflect on current practices and incorporate new ones.

372.21 W361

Education Centre, LLC

We (love) numbers, colors, and shapes. Preschool : 125 fun and practical early math activities!

Greensboro, NC: Mailbox Books, 2014.

Subjects: Education, Preschool—Activity programs; Mathematics—Study and teaching (Preschool)—Activity programs.

Summary: Teach your little learners with these fun, practical, and developmentally appropriate activities. You get group-time ideas, literature activities, centre ideas, art activities, and more.

372.218 B787 OVERSIZE

Bowman, Jodie

Kindergarten plus!: an integrated program for the early years classroom [kit]

Winnipeg, MB: Portage & Main Press, 2008.

Subjects: Kindergarten—Ontario—Curricula; Curriculum planning—Ontario; Kindergarten—Activity programs—Ontario.

Summary: Resource Overview—Let the Journey Begin (divided into 3 sections : 1) includes how to implement the Kindergarten Plus program; 2) includes all the forms, cards and blackline masters for the theme-based units; 3) supports a home-school connection by providing take-home activities. Provincial curriculum correlation chart (The curriculum correlation chart is based on *The Kindergarten Program Ontario*, 2006).

Monthly Themes: Unit 1 — I Am Special!: The first unit focuses on helping your students orient themselves to the "Big School". Students learn classroom rules and routines and recognize that every classmate is special. Unit 2 — Apples and Pumpkins: With the beginning of the fall season, students engage in activities involving apples and pumpkins. Unit 3 — Colours and Shapes: Students learn about the colours and shapes of a variety of everyday objects. Unit 4 — Gingerbread Man: Students run, run, run as fast as they can to take part in exciting gingerbread-themed activities. Unit 5 — Winter Wonderland: Students investigate the magic of the winter season. Unit 6 — Friendship: Excitement and energy abound as students discover the importance of having friends and being a good friend. Unit 7 — All About Bears: During the final weeks of winter, students venture into an exciting unit on bears. Unit 8 — Spring Is Here!: Students explore and discover the changes spring brings to the outdoor world. Unit 9 — On the Farm: Students kick up their heels and "travel" to the farm. Unit 10 — Community Helpers: Students

"travel" around the local community and celebrate those who contribute to it. CD: Kindergarten Plus! songs.

372.35 A549

Anderson, Sally

Math and science investigation : helping young learners make big discoveries

Lewisville, NC: Gryphon House, Inc., 2012.

Subjects: Mathematics—Study and teaching (Early childhood)—Activity programs; Science—Study and teaching (Early childhood)—Activity programs; Early childhood education.

Summary: Young children are naturally interested in the patterns and processes occurring in the world around them. They are starting to ask questions about the environment and world beyond. They are anxious to explore the creatures in their own backyard. This book supports their natural curiosity and encourages them to explore what happens around them.

372.35 M818

Moomaw, Sally

Teaching STEM in the early years : activities for integrating science, technology, engineering, and mathematics

St. Paul, MN: Redleaf Press, 2013.

Subjects: Technology—Study and teaching (Early childhood); Mathematics—Study and teaching (Early childhood); Science—Study and teaching (Early childhood); Engineering—Study and teaching (Early childhood).

Summary: The foundation for science, technology, engineering, and mathematics education begins in the early years. Teaching STEM in the early years provides activities and learning centre ideas that seamlessly integrate STEM throughout your early childhood classroom.

372.357 C441

Chalufour, Ingrid

Discovering nature with young children

St. Paul, MN: Redleaf Press, 2003.

Subjects: Nature study. Science—Study and teaching (Early childhood).

Summary: This book explores the wide-ranging elements that make up the natural world around us. The curriculum replaces simple fact-feeding practices with the development of long-term scientific reasoning, including literacy skills and numeracy skills, such as hypothesis, inference, prediction, and estimation.

Notes: Prekindergarten curriculum. Kindergarten curriculum renewal.

372.7 A168

Academic language in diverse classrooms. Mathematics, grades K-2 : promoting content and language learning

Thousand Oaks, CA: Corwin, 2013.

Subjects: Content area reading. English language—Study and teaching (Primary)—Foreign speakers. Language arts (Primary).

372.7 A214 OVERSIZE

Adams, Lorraine

Eaglecrest books. Math literacy collection [kit]

Duncan, BC: Eaglecrest books, 2018.

Subjects: Counting—Study and teaching (Primary). Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

Summary: The books in this collection provide children with real life stories that illustrate the role that math plays in the world around us. All the books in this collection are leveled to assist teachers and students in choosing a text that is appropriate for each child. Contents: Titles (6 copies of each title): *Number one — Number two — Number three — Number four — Number five — Number six — Number seven — Number eight — Number nine — Number ten — Number eleven — Number twelve — Adding doubles — Order — Counting by 2's — Patterns — Triangles — Addition — Subtraction — Counting by 10's — Squares — Circles — Counting by 5's — Rectangles — Measurement.*

372.7 A835

Askew, Mike

A practical guide to transforming primary mathematics : activities and tasks that really work

Abingdon, Oxon, England: Routledge, 2016.

Subjects: Mathematics—Study and teaching (Primary). Mathematics—Study and teaching (Primary)—Activity programs.

Summary: This practical guide focuses on showing you how to unlock the powerful potential of a small set of consistent principles and practices, known as the teaching tripod, to develop a coherent approach to teaching mathematics.

372.7 B199

Bamberger, Honi Joyce

Math misconceptions, preK-grade 5 : from misunderstanding to deep understanding

Porstmouth, NH: Heinemann, 2010.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Preschool). Mathematics—Study and teaching (Primary).

Summary: This book identifies the most common errors relative to the five NCTM content strands (number and operations, algebra, geometry, measurement, and data analysis and probability); investigates the source of these misunderstandings; and proposes ways to avoid as well as "undo" misconceptions. Using classroom vignettes that highlight common misconceptions in each content area, followed by applicable research about the root causes of the confusion, the authors offer numerous instructional ideas and interventions designed to prevent or correct the misconception.

372.7 B412

Bedora, Julie

Ready-to-go skill-building math packs for independent learning : reproducible packs of fun practice pages that help kids really learn all the math concepts they need to know-independently

New York, NY: Scholastic, 2001.

Subjects: Mathematics—Study and teaching (Primary).

Summary: Make those all-important math concepts stick with this big collection of engaging reproducibles that kids can do all by themselves. These instant practice packs cover addition, subtraction, word problems, time, money, measurement, patterns, and more. These activities are great for morning jumpstarts, students who finish their work early, or meaningful homework.

372.7 B458

Bender, William N.

Differentiating math instruction : strategies that work for K-8 classrooms

Thousand Oaks, CA: Corwin Press, 2005.

Subjects: Mathematics—Study and teaching (Elementary); Individualized instruction; Mathematics—Study and teaching (Primary).

Summary: Teachers continue to struggle with the reality that math performance varies widely from student to student, and the tactics that seem to work with one group may not fit with another. In this guide, teachers have a wealth of critical strategies at their fingertips that will help them differentiate instruction to raise student achievement in their classrooms. The book's features include: "Ideas From Teachers" sections that highlight actual examples of the differentiation process in action, at-a-glance lists of "Top Ten Tactics" for successful implementation in K-8 classrooms, website reviews that outline additional online resources for effective mathematics instruction, and concrete strategies to tap multiple intelligences. Research on the value of brain-compatible teaching is combined with teacher-generated tips, including creative ways to get students visualizing, vocalizing, and moving during math—to make instruction more meaningful, motivational, and successful.

372.7 B458

Bender, William N.

RTI in math : practical guidelines for elementary teachers

Bloomington, IN: Solution Tree Press, 2011.

Subjects: Mathematics—Study and teaching (Elementary); Response to Intervention (Learning disabled children).

Summary: This map of the RTI process offers an overview of research, detailed guidance through each stage of implementation, tools for teacher reflection and growth, and discussion of support strategies beyond the classroom. The authors analyze a variety of common student difficulties in elementary math and apply a three-tier RTI model to the general education classroom.

372.7 B617

Birch, David

The king's chessboard

New York, NY: Puffin Books, 1988

Subjects: Pride and vanity—Juvenile literature; Mathematics—Juvenile literature.

Summary: Geometric progressions are explored in this resource as a vain king insists that a wise man accept a reward for his service. The man reluctantly requests a daily payment of rice that is to be doubled for each square of the chessboard.

Notes: Mathematics grade 2 (2009); Mathematics grade 3 (2009); Mathematics grade 4 (2007); Mathematics grade 5 (2008).

372.7 B862

Britt, Bonnie Adama

Mastering basic math skills : games for kindergarten through to second grade

Reston, VA: National Council of Teachers of Mathematics, 2014.

Subjects: Early childhood education—Activity programs; Games in mathematics education; Mathematics—Study and teaching (Early childhood)—Activity programs.

Summary: Designed for use in the classroom and at home, this book includes access to downloadable More4U materials such as ten-frame cards, game boards, and recording sheets. All the games are correlated with the Common Core State Standards for Mathematics. Research shows that games have many benefits. Math games: increase curiosity and motivation; allow for cooperative learning opportunities; reinforce mathematical learning and skills; build strategy and reasoning know-how; teach life skills, and reduce math anxiety.

372.7 B884

Brownell, Jeanine O’Nan

Big ideas of early mathematics : what teachers of young children need to know

Boston, MA: Pearson, 2014.

Subjects: Mathematics—Study and teaching (Early childhood).

Summary: In this guide, classroom teachers, coaches, curriculum coordinators, college students, and teacher educators get a practical look at the foundational concepts and skills of early mathematics, and see how to implement them in their early childhood classrooms. *Big Ideas of Early Mathematics* presents the skills that educators’ need to organize for mathematics teaching and learning during the early years. For teachers of children ages three through six, the book provides foundations for further mathematics learning and helps facilitate long-term mathematical understanding. The Enhanced Pearson eText features embedded video.

372.7 B955

Burgess, Leanne

Early patterns in mathematics. Grades 1-3 : investigating patterns in shape and number

Rowley, MA: Didax Educational Resources, 2003.

Subjects: Mathematics—Study and teaching (Elementary).

Summary: The activities in this book enable students to participate in pattern work involving shapes and numbers using a variety of materials. This book is suitable for students at various levels as the activities vary from identifying simple shape patterns to number sequences and finding the rule.

372.7 B967

Burns, Marilyn

Spaghetti and meatballs for all : a mathematical story

New York, NY: Scholastic, 1997.

Subjects: Mathematics—Juvenile fiction; Family reunions—Juvenile fiction.

Summary: The seating for a family reunion gets complicated as people rearrange the tables and chairs to seat additional guests. The story will draw children into thinking about area and perimeter.

372.7 C212

Canadian curriculum mathsmart. Grade 1

Richmond, ON: Popular Book Company (Canada) Ltd., 2015.

Subjects: Creative activities and seat work. Mathematics—Study and teaching (Primary).

372.7 C514

Checkley, Kathy

Essentials of mathematics, K-6 : effective curriculum, instruction, and assessment

Alexandria, VA: Association for Supervision and Curriculum Development, 2006.

Subjects: Mathematics—Study and teaching (Elementary); Teacher participation in curriculum planning; Mathematics—Study and teaching (Middle school).

Summary: This book explores how educators—from classroom teachers to central office administrators—are tackling these major challenges in math education: emphasizing algebraic thinking, problem solving, and communication; relying on research to guide the implementation of new teaching practices; connecting math activities to larger purposes and everyday experiences; differentiating instruction based on students' learning styles, interests, and readiness levels; helping teachers use classroom assessment to guide instruction; and improving math teaching practices through teacher professional development and analysis of student work. Whether you're working with an established math curriculum or rethinking your whole approach, here's an opportunity to see where your program stands in the context of current trends.

372.7 C734

Kanold, Timothy D. (Ed.)

Common Core mathematics in a PLC at work. Grades K-2

Bloomington, IL: Solution Tree Press, 2012.

Subjects: Mathematics—Study and teaching (Primary); Professional learning communities.

Summary: Discover what students should learn and how they should learn it at each grade level, including insight into prekindergarten early childhood readiness expectations for the K-2 standards, as well as the unique Counting and Cardinality standards for kindergarten.

372.7 C752

Conklin, Melissa; Sheffield, Stephanie

It makes sense! grades K-2 : using the hundreds chart to build number sense

Sausalito, CA: Math Solutions, 2012.

Subjects: Concept learning; Early childhood education; Mathematics—Study and teaching (Elementary); Mathematics—Study and teaching (Early childhood).

Summary: Every lesson and game in this resource supports teachers in making the most of the hundreds chart, helping their students develop strategies and build concepts needed for a robust understanding of numbers and place value.

372.7

Dacey, Linda; Gartland, Karen

Well played, Grades K-2 : building mathematical thinking through number games and puzzles

Portland, ME: Stenhouse Publishers, 2016.

Subjects: Arithmetic—Study and teaching (Primary). Counting. Mathematics—Study and teaching (Primary).

Summary: Students love math games and puzzles, but how much are they really learning from the experience? Too often, math games are thought of as just a fun activity or enrichment opportunity. This book shows you how to make games and puzzles an integral learning component that provides teachers with unique access to student thinking.

372.7 D117

Dacey, Linda; Gartland, Karen

Well played. Grades 3-5 : building mathematical thinking through number games and puzzles

Portland, ME: Stenhouse Publishers, 2015.

Subjects: Mathematical recreations; Games in mathematics education; Mathematics—Study and teaching (Elementary).

Summary: Students love math games and puzzles, but how much are they really learning from the experience? Too often, math games are thought of as just a fun activity or enrichment opportunity. *Well Played* shows you how to make games and puzzles an integral learning component that provides teachers with unique access to student thinking.

372.7 D117

Dacey, Linda Schulman

Zeroing in on number and operations. Grades 1-2 : key ideas and common misconceptions

Portland, ME: Stenhouse Publishers, 2010.

Subjects: Mathematics—Study and teaching (Primary).

Summary: The modules for grades 1 and 2 are organized into three sections: Counting, Number Sense, and Numeration; Meaning of Addition and Subtraction and Basic Facts; and Building Computational Fluency. Each module begins with identification of its focus, challenges, and misconceptions, and features adaptable strategies and activities to implement with students.

372.7 E13

Early mathematics. Grades K-1 : learning centers

Rowley, MA: Didax, 2012.

Subjects: Mathematics—Study and teaching (Elementary).

Summary: With this teacher resource guide to setting up learning centres in the K-1 classroom, children explore shapes at the Crazy Creature Zoo, explore volume with a class supermarket, explore quantity in the Baker's Corner, and much more. Four learning centres, with six activity stations per centre, focus on patterns, number, measurement, and the geometry concepts of shape and space.

372.7 F518

Fiore, Mary; Lebar, Maria Luisa

Four roles of the numerate learner : effective teaching and assessment strategies to help students think differently about mathematics

Markham, ON: Pembroke Publishers Limited, 2015.

Subjects: Effective teaching. Mathematics—Study and teaching (Early childhood)—Evaluation. Mathematics—Study and teaching (Elementary)—Evaluation.

Summary: This book introduces a framework (sense maker, skill user, thought communicator, and critical interpreter) that supports an integrated approach to effective mathematics instruction. It builds on educators' understanding of how to teach mathematics effectively and borrows from successful frameworks used to teach literacy. The goal is to provide multiple entry points into a new world of mathematics instruction, a new way of thinking and learning where learners engage in critical thinking about numeracy and act on this knowledge.

372.7 G313

Geiser, Traci Ferguson

Early childhood math centres

Westminster, CA: Teacher Created Materials, 2003.

Subjects: Mathematics—Study and teaching (Early childhood).

Summary: Hands-on, developmentally appropriate activities help children prepare for reading, writing, and higher-level math. The centre suggestions vary in difficulty and address different learning styles in order to meet the needs of individual children. This book features: counting, patterns, sorting and classifying, shapes, sequencing, measurement, and graphing.

372.7 G352

Georgepoulos, Demetra

Instant math assessments. Grade 1

London, ON: Geowat Innovative Teacher Publishing, 2006.

Subjects: Mathematical ability—Testing; Mathematics—Study and teaching (Primary).

Summary: This book includes five strands of math, reproducible student pages, a rubric and checklist.

372.7 G352

Georgepoulos, Demetra

Instant math assessments. Grade 2

London, ON: Geowat Innovative Teacher Publishing, 2006.

Subjects: Mathematical ability—Testing; Mathematics—Study and teaching (Primary).

Summary: This book includes five strands of math, reproducible student pages, a rubric and checklist.

372.7 G352

Georgepoulos, Demetra

Instant math assessments. Grade 3

London, ON: Geowat Innovative Teacher Publishing, 2006.

Subjects: Mathematical ability—Testing; Mathematics—Study and teaching (Primary).

Summary: This book includes five strands of math, reproducible student pages, a rubric and checklist.

372.7 G831

Gresham, Gina; Little, Mary

RTI and mathematics : practical tools for teachers in K-8 classrooms

Boston, MA: Pearson, 2013.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary).

Summary: This book clarifies and describes the issues of RTI, the connections among teachers' knowledge and skills and their use with RTI, and the role of the teacher within the classroom and school, providing evidence-based content, scenarios, examples, resources, and activities; modeling description; and reflecting upon the key learning outcomes of RTI.

372.7 G957 OVERSIZE

Guillaume Andrea M.

Classroom mathematics inventory for grades K-6 : an informal assessment

Boston, MA: Pearson/Allyn & Bacon, 2006.

Subjects: Mathematics—Study and teaching (Elementary)—Evaluation; Mathematical ability—Testing.

Summary: The *Classroom Mathematics Inventory* (CMI) is an informal assessment for use in evaluating students' understanding and ability across the range of the elementary mathematics curriculum. Similar to an informal reading inventory, the CMI is an informal classroom assessment tool meant to spark conversations between teacher and student regarding the student's understanding, skills, and attitudes.

372.7 H236

Lawson, Jennifer

Hands-on mathematics. Grade 1

Winnipeg, MB: Portage & Main Press, 2007.

Subjects: Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

Summary: Contents: Module 1, patterns and relations — Module 2, shape and space — Module 3, number concepts and operations.

372.7 H236

Soltess, Diane

Hands-on mathematics. Grade 2

Winnipeg, MB: Portage & Main Press, 2007.

Subjects: Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

Summary: Contents: Module 1, patterns and relations — Module 2, statistics and probability — Module 3, shape and space — Module 4, number concepts — Module 5, number operations.

372.7 H236

Soltess, Dianne

Hands-on mathematics. Grade 3, part 1

Winnipeg, MB: Portage & Main Press, 2007.

Subjects: Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

Summary: Contents: Module 1, patterns and relations — Module 2, statistics and probability. Part 1 includes Introduction and units 1-2. Part 2 includes units 3-6. Note: When using Part 2, you will occasionally need to refer to a page from Part 1. Please keep Part 1 close at hand for this purpose.

372.7 H236

Soltess, Dianne

Hands-on mathematics. Grade 3, part 2

Winnipeg, MB: Portage & Main Press, 2007.

Subjects: Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

Summary: Contents: Module 3, shape and space — Module 4, Number concepts — Module 5, number operations. Part 1 includes Introduction and units 1-2. Part 2 includes units 3-6. Note: When using Part 2, you will occasionally need to refer to a page from Part 1. Please keep Part 1 close at hand for this purpose.

372.7 H236

Soltess, Dianne

Hands-on mathematics. Mental math activities, grades 1-4

Winnipeg, MB: Portage & Main Press, 2007.

Subjects: Mathematics—Problems, exercises, etc. Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

372.7 H421

Haylock, Derek

Understanding mathematics in the lower primary years : a guide for teachers of children 3-8

Thousand Oaks, CA: Sage Publications, 2003.

Subjects: Mathematics—Study and teaching (Primary).

Summary: This resource is written for those who teach mathematics, as well as for those who wish to have a clearer understanding of the mathematical ideas behind the material they use in the classroom. This book also shows how children can be helped to develop an understanding of mathematics for themselves.

Notes: Prekindergarten curriculum; Kindergarten curriculum renewal; Mathematics Kindergarten (2007); Mathematics grade 1 (2007); Mathematics grade 2 (2009).

372.7 H436

Hearn, Meghan; Winner, Matthew C.

Teach math with the Wii : engage your K-7 students through gaming technology

Eugene, OR: International Society for Technology in Education, 2013.

Subjects: Mathematics—Study and teaching (Elementary); Nintendo Wii video games; Games in mathematics education; Mathematics—Study and teaching (Primary); Mathematics—Study and teaching (Early childhood).

Summary: Schools today use gaming technology as a way to engage and connect students with familiar technology tools. This book embraces the Nintendo Wii as a tool to support mathematics instruction, allowing students to make real-life connections with math concepts. Wii activities can be engaging, student-friendly, and accompanying data production tools generate scores, times, and rankings for students to explore and discuss in the mathematics classroom. As students play the games, teachers have the opportunity to guide students through rich dialogues, posing questions to elicit mathematical thinking. Included with this book are 48 lesson sparks organized by grade level and aligned to Common Core State Standards. Audiences for this content include K-8 teachers and math educators.

372.74 H585

Heskett, Tracie

Math strategies to use with your English language learners. Grades 1-2

Westminster, CA: Teacher Created Resources, 2012.

Subjects: Mathematics—Study and teaching (Primary).

Summary: This book contains dozens of specific strategies for introducing math concepts. It provides activities and lessons for reinforcing math skills. A student-friendly glossary of math terms is included, as well as a section devoted to "cracking the code" of word problems.

372.7 H847

Wedekind, Kassia Omohundro

How did you solve that? : small-group math exchanges with young students [DVD]

Portland, ME: Stenhouse Publishers, 2013.

Subjects: Group guidance in education. Mathematics—Study and teaching (Elementary).

Mathematics—Study and teaching (Primary).

Summary: This book offers a glimpse into two classrooms as teachers facilitate small-group math meetings with their kindergarten and second-grade students. For Grades K-3 teachers.

372.7 H927

Humphreys, Cathy; Parker, Ruth.

Making number talks matter : developing mathematical practices and deepening understanding, grades 4-10

Portland, ME: Stenhouse Publishers, 2015.

Subjects: Mathematics—Study and teaching (Elementary); Mathematics—Study and teaching (Middle school); Mathematics—Study and teaching (Secondary).

Summary: This book will be an invaluable resource whether you are already using *Number Talks* or not; whether you are an elementary, middle school, high school, or college teacher; or even if you are a parent wanting to support your child with mathematics. If you've been looking for ways to transform your mathematics classroom—to bring sense-making and divergent thinking to the foreground, this book is for you.

372.7 I39

Saskatchewan Indian Federated College

Indian and Métis mathematics units for the elementary level

Regina, SK: The Dept, 1996.

Subjects: Indians of North America—Study and teaching (Elementary); Indians of North America—Saskatchewan—Education; Mathematics—Study and teaching (Elementary).

Summary: This document provides three mathematics units for each of the grade levels from Kindergarten to Grade 5 which provide ideas for increasing and enhancing mathematics learning for Indian and Métis students.

372.7 K93

Kroll, Virginia

Equal shmequal : a math adventure

Watertown, MA: Charlesbridge, 2005.

Subjects: Equations—Juvenile fiction; Mathematics—Juvenile fiction; Forest animals—Juvenile fiction.

Summary: To have fun at a game of tug-of-war, forest animals in this book balance the teams by using a see-saw. The book includes nonfiction math notes for meanings of equal.

372.7 K96

Kuhns, Catherine Jones

Building number sense : games and activities to practice combinations to 10

Peterborough, NH: Crystal Springs Books, 2009.

Subjects: Mathematics—Study and teaching (Early childhood); Combinations—Study and teaching (Early childhood).

Summary: Students are guaranteed to enjoy the activities in this book. But more than having fun, they will be engaged in the critical practice they need to learn by heart: the number combinations to 10.

372.7 L652

Leuenberger, Constance J.

Teaching early math skills with favorite picture books

New York, NY: Scholastic Inc., 2007.

Subjects: Picture books; Mathematics—Study and teaching (Primary).

Summary: A master kindergarten teacher shares her classroom-tested, inquiry-based lessons for using picture book and concept book favourites to help young learners build skills in number sense, basic operations, patterns & algebra, geometry & spatial sense, time, money, measurement, and more. Lessons challenge students to problem solve and to use critical thinking skills. This book includes interactive reproducible activities and manipulatives.

372.7 M141

McElligott, Matthew

Bean thirteen

New York, NY: G. P. Putman's Sons, 2007.

Subjects: Insects—Juvenile fiction; Division—Juvenile fiction; Mathematics—Juvenile fiction.

Summary: Two bugs, Ralph and Flora, try to divide 13 beans so that the unlucky thirteenth bean disappears, but they soon discover that the math is not so easy.

372.7 M147

McGrath, Caroline

Supporting early mathematical development : practical approaches to play-based learning

Abingdon, Oxon, England : Routledge, 2010.

Subjects: Mathematics—Study and teaching (Early childhood); Early childhood education.

Summary: *Supporting Early Mathematical Development* is an essential text for current early years practitioners and students, offering an excellent blend of theory and practice that will enable you to provide successful mathematical education for children from birth to eight years old. Charting the delivery of mathematical development in playgroups, children's centres, nurseries and primary schools, it forges links between current practice and fundamental Early Years principles and makes suggestions for creating effective pedagogies in math teaching.

372.7 M219

Gotta have graphs. Grades 1-6 : 35 kid-pleasing, curriculum-based graphing activities and data display lessons

Greensboro, NC: Education Centre, 2003.

Subjects: Graphic methods; Mathematics—Study and teaching (Elementary).

Summary: Create meaningful math experiences with fun, easy-to-implement graphing activities. Covering 13 different types of graphs including object graphs, picture graphs, bar graphs, glyphs, and more, each unit provides step-by-step instructions for introducing the activity as well as for collecting, displaying, analyzing, and discussing the data.

372.7 M381

Martin, Joan D.

Integrating math into the early childhood classroom

New York, NY: Scholastic, 2007.

Subjects: Mathematics—Study and teaching (Kindergarten); Mathematics—Study and teaching (Primary).

Summary: Help young children build confidence in mathematics right from the start. This resource offers easy and natural ways to fit math-rich experiences into early childhood classroom routines and activities. This book includes research-based strategies, ideas for meeting the needs of diverse learners, assessment and recordkeeping forms and suggestions.

372.7 M426 OVERSIZE

University of Alaska Fairbanks

Math in a cultural context : lessons learned from Yup'ik Eskimo elders [kit]

Calgary, AB: Detselig Enterprises, 2003-2004.

Subjects: Yupik Eskimos—Alaska; Mathematics—Study and teaching (Elementary).

Summary: This series provides an authentic example of ways to integrate First Nations, Métis and Inuit content, to incorporate cultural ways of knowing, and to bridge gaps between different ways of knowing and understanding. The series includes cultural stories given by Elders.

Notes: Picking Berries—Mathematics Grade 2 (2008); Patterns and Parkas—Mathematics Grade 2 (2008); Designing Patterns—Mathematics Grade 4 (2007); Mathematics Grade 5 (2008); Building a Fish Rack—Mathematics Grade 7 (2007); Building a Smokehouse—Mathematics 10—Workplace and Apprenticeship (2010).

372.7 M432

Mathology little books. Grade 1, Number strand [kit]

Toronto, ON: Pearson Canada, 2017.

Subjects: Mathematics—Study and teaching (Primary).

Summary: This is a series of math little books for K-3 that allows teachers to match books to a child's or group's level of math understanding, providing rich opportunities for teaching and learning. Contents: Titles: *Cats and kittens!* — *How many is too many?* — *A family cookout* — *Hockey time!* — *That's 10!* — *Paddling the river* — *At the corn farm* — *On safari!* — *Buy 1...get 1* — *Canada's oldest sport.*

372.7 M462

Mathology little books. Grade 2, Number strand [kit]

Toronto, ON: Pearson Canada, 2017.

Subjects: Mathematics—Study and teaching (Primary).

Summary: A series of math little books for K-3 that allows teachers to match books to a child's or group's level of math understanding, providing rich opportunities for teaching and learning.

Contents: Titles: *The best birthday* — *Array's bakery* — *Marbles, alleys, mibs, and guli!* — *The great dogsled race* — *The money jar* — *A class-full of projects* — *Back to Batoche* — *Family fun day* — *What would you rather?* — *Ways to count.*

372.7 M432

Mathology little books. Grade 3, Number strand [kit]

Toronto, ON: Pearson Canada, 2017.

Subjects: Mathematics—Study and teaching (Primary).

Summary: A series of math little books for K-3 that allows teachers to match books to a child's or group's level of math understanding, providing rich opportunities for teaching and learning.

Contents: Titles: *Math makes me laugh* — *How numbers work* — *Calla's jingle dress* — *Finding Buster* — *Hockey homework* — *Sports camp* — *The street party* — *Planting seeds* — *Fantastic journeys.*

372.7 M621

Michals, Deborah Kayton

Up, down, move around-math and literacy : active learning for preschoolers

Lewisville, NC: Gryphon House, Inc., 2013.

Subjects: Mathematics and physical education; Mathematics—Study and teaching (Preschool) — Activity programs; Early childhood education; Active learning.

Summary: By connecting physical activity with learning, the books in this series provide preschoolers with educational enrichment as they explore, inquire, experiment, and discover. Filled with simple, stimulating games, they will have kids jumping, shaking, rolling, dancing, and clapping as they learn. Activities like the Syllable Freeze Dance and Math Orchestra help young children develop number sense, practice counting and rhyming, and learn about letter shapes and story structure.

372.7 M667

Minton, Leslie

What if your ABCs were your 123s? : building connections between literacy and numeracy

Thousand Oaks, CA: Corwin Press, 2007.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary).

Summary: This book illustrates the parallels between literacy and numeracy, helping elementary teachers take what they know about teaching literacy and apply that knowledge to strengthen their math instruction.

372.7 M913

Moss, Joan; Bruce, Catherine D.

Taking shape : activities to develop geometric and spatial thinking, grades K-2

Don Mills, ON: Pearson Canada, 2016.

Subjects: Geometry—Study and teaching (Primary). Mathematics—Study and teaching (Primary). Spatial ability—Study and teaching (Primary).

Summary: This book offers a host of activities to use with four- to seven-year-olds that promote understanding in geometry, but also focus on building spatial reasoning skills.

372.7 M978

Murphy, Stuart J.

100 days of cool

New York, NY: HarperCollins Publishers, 2004.

Subjects: Mathematics—Study and teaching (Elementary); Counting—Juvenile literature.

Summary: Four students arrive on the first day of school looking cool and their teacher challenges them to keep it up as they count down one hundred days to a cool celebration.

372.7 M978

Murphy, Stuart J.

Animals on board

New York, NY: HarperCollins Publishers, 1998.

Subjects: Mathematics—Study and teaching (Elementary); Counting—Juvenile literature; Addition—Juvenile literature.

Summary: This book introduces simple addition through a rhyming text about animals being delivered for a merry-go-round.

372.7 M978

Murphy, Stuart J.

Captain Invincible and the space shapes

New York, NY: HarperCollins Publishers, 2001.

Subjects: Mathematics—Study and teaching (Elementary); Geometry—Juvenile literature.

Summary: While piloting his spaceship through the skies, Captain Invincible encounters three-dimensional shapes, including cubes, cylinders, and pyramids.

372.7 M978

Murphy, Stuart J.

Coyotes all around

New York, NY: HarperCollins Publishers, 2003.

Subjects: Counting—Juvenile literature; Estimation theory—Juvenile literature; Mathematics—Study and teaching (Elementary).

Summary: A pack of coyotes tries to determine how many roadrunners and other creatures are in their vicinity, and while some count different groups and add their totals together, Clever Coyote rounds off and estimates.

372.7 M978

Murphy, Stuart J.

Elevator magic

New York, NY: HarperCollins Publishers, 1997.

Subjects: Subtraction—Juvenile literature; Mathematics—Study and teaching (Elementary).

Summary: This book explains the concept of subtraction through a rhyming text about a descending elevator.

372.7 M978

Murphy, Stuart J.

A fair bear share

New York, NY: HarperCollins Publishers, 1998.

Subjects: Mathematics—Study and teaching (Elementary); Arithmetic—Juvenile literature; Counting—Juvenile literature.

Summary: Four bear cubs collect ingredients for a blueberry pie, counting and recounting them as their supply grows.

372.7 M978

Murphy, Stuart J.

Let's fly a kite

New York, NY: HarperCollins Publishers, 2000.

Subjects: Symmetry—Juvenile literature; Ratio and proportion—Juvenile literature.

Summary: Two squabbling siblings learn about symmetry when their babysitter helps them build and fly a kite.

372.7 M978

Murphy, Stuart J.

Mall mania

New York, NY: HarperCollins Publishers, 2006.

Subjects: Mathematics—Study and teaching (Elementary); Shopping malls—Juvenile literature; Counting—Juvenile literature; Addition—Juvenile literature.

Summary: Shopping, counting, and a birthday present all add up to a surprise ending on Mall Mania Day.

372.7 M978

Murphy, Stuart J.

The sundae scoop

New York, NY: HarperCollins Publishers, 2003.

Subjects: Combinations—Juvenile literature; Combinations analysis—Juvenile literature; Mathematics—Study and teaching (Elementary); Permutations—Juvenile literature.

Summary: At the picnic on the last day of school, James, his friends, and the cafeteria lady make a variety of ice cream sundaes, using mathematics to figure out how many different kinds they can create.

372.7 M978

Murphy, Stuart J.

Tally O'Malley

New York, NY: HarperCollins Publishers, 2004.

Subjects: Games for travelers—Juvenile literature; Automobile travel—Juvenile literature.

Summary: On a car trip to the beach, the O'Malley family children compete by playing games together.

372.7 N325

Greenes, Carole E. (Ed.)

Navigating through algebra in prekindergarten-grade 2

Reston, VA: National Council of Teachers of Mathematics, 2001.

Subjects: Algebra—Study and teaching (Primary); Algebra—Study and teaching (Early childhood).

Summary: This book demonstrates how some of the fundamental ideas of algebra can be introduced, developed, and extended. It focuses on repeating and growing patterns, introduces the concepts of variables and equality, and examines relations and functions. Its activities are designed to capture the interest of small children as they investigate growing patterns, use pictures of dogs with varying numbers of spots to solve for missing addends, and use spinners to identify and explore functions. The supplemental CD-ROM features interactive electronic activities, master copies of activity pages for students, and additional readings for teachers.

372.7 N325

Findell, Carol R. (Ed.)

Navigating through geometry in prekindergarten-grade 2

Reston, VA: National Council of Teachers of Mathematics, 2001.

Subjects: Geometry—Study and teaching (Primary); Geometry—Study and teaching (Early childhood).

Summary: Focusing on the important ideas of geometry, this book shows how to investigate two- and three-dimensional shapes with very young students. It introduces methods to describe location and position, explores simple transformations, and addresses visualization, spatial reasoning, and the building and drawing of constructions. Activities in each chapter pose questions that stimulate students to think more deeply about mathematical ideas. The supplemental CD-ROM also features interactive electronic activities, master copies of activity pages for students, and additional readings for teachers.

372.7 N325

Cavanagh, Mary (Ed.)

Navigating through number and operations in prekindergarten-grade 2

Reston, VA: National Council of Teachers of Mathematics, 2004.

Subjects: Mathematics—Study and teaching (Primary); Reasoning in children; Problem solving in children; Mathematics—Study and teaching (Early childhood).

Summary: Children in prekindergarten focus on counting and gradually master the essential one-to-one matching of an object to a number. By the end of second grade, they can represent one-, two-, and three-digit numbers, understand simple fractions, and apply a variety of facts and strategies to add and subtract skillfully. Investigations in this book support this progression by inviting students to count and order ducklings in a line, compute the total cost of several items on a menu, and play a variety of games that reinforce their understanding of number, addition, and subtraction. Problems in story form develop students' listening skills and immerse them in real-world mathematics. The supplemental CD-ROM features interactive electronic activities, master copies of activity pages for students, and additional readings for teachers.

372.7 N426

Nelson, Greg

Fostering children's number sense in grades K-2 : turning math inside out

Boston, MA: Pearson, 2014.

Subjects: Numeracy; Number concept; Mathematics—Study and teaching (Early childhood).

Summary: This book is a powerful, hands-on resource that helps in-service teachers, curriculum coaches, and math intervention specialists ensure children's deep understanding of addition and subtraction in ways that enable long-term growth. Packed with child-centred instructional strategies, powerful and engaging learning materials, and revealing assessment tools, the book is clearly laid out and cross-referenced to the Common Core State Standards.

372.7 N856

Norris, Kit; Schuul, Sarah

Engage in the mathematical practices : strategies to build numeracy and literacy with K-5 learners

Bloomington, IN: Solution Tree Press, 2016.

Subjects: Mathematics—Study and teaching (Early childhood). Number concept. Numeracy.

Summary: Discover more than 40 strategies for ensuring students learn critical reasoning skills and retain understanding. Each chapter is devoted to a different Standard for Mathematical Practice and offers an in-depth look at why the standard is important for students' understanding of mathematics.

372.7 N974

Daoust, Cindy K. (Ed.)

Nursery rhyme math. Preschool-kindergarten

Greensboro, NC: Education Centre, 2004.

Subjects: Mathematics—Study and teaching (Preschool); Nursery rhymes; Kindergarten—Activity programs; Mathematics—Study and teaching (Early childhood); Education, Preschool—Activity programs.

Summary: This book is a teacher's resource with 15 units, each based on a nursery rhyme, containing math activities for preschool and kindergarten students.

372.7 O12

Oberdorf, Christine

Using formative assessment to drive mathematics instruction in grades preK-2

Larchmont, NY: Eye on Education, 2012.

Subjects: Mathematics—Study and teaching (Early childhood); Mathematics—Study and teaching (Primary); Mathematical ability—Testing.

Summary: Provide targeted mathematics instruction for every child. These books combine formative assessment with practical activities to differentiate the elementary classroom. The formative assessments include student work samples at varying levels.

372.7 P252

Parks, Amy Noelle

Exploring mathematics through play in the early childhood classroom

New York, NY: Teachers College Press, 2015.

Subjects: Mathematics—Study and teaching (Early childhood)—Activity programs.

Summary: This practical book provides pre- and inservice teachers with an understanding of how math can be learned through play. The author helps teachers to recognize the mathematical learning that occurs during play, to develop strategies for mathematizing that play, and to design formal lessons that make connections between mathematics and play. Common Core State Standards are addressed throughout the text to demonstrate the ways in which play is critical to standards-based mathematics teaching, and to help teachers become more familiar with these standards.

372.7 P261

Parrish, Sherry

Number talks. Grades K-5 : helping children build mental math and computation strategies

Sausalito, CA: Math Solutions, 2010.

Subjects: Arithmetic—Study and teaching (Primary); Thought and thinking—Study and teaching (Primary); Arithmetic—Study and teaching (Elementary); Thought and thinking—Study and teaching (Elementary).

Summary: This resource supports new and experienced educators who want to prepare for and design purposeful number talks for their students; the author demonstrates how to develop grade-level-specific strategies for addition, subtraction, multiplication, and division. A number talk is a five- to fifteen-minute classroom conversation about purposefully crafted computation problems that are solved mentally.

372.7 P316

Media Group

Patterns [DVD]

Saskatoon, SK: Bamboo Shoots, 2000.

Subjects: Sequences (Mathematics); Mathematics—Study and teaching (Primary); Mathematics—Juvenile films; Animated films.

Summary: In this program from the *Math Monsters* Series, the Monsters learn how to recognize, describe, extend, and create patterns. One Monster starts and asks the next to continue—but what exactly makes a pattern, and how can it be extended? Other Monsters decorate their rooms with flip patterns, number patterns, and growth patterns.

Notes: Kindergarten curriculum renewal; Arts education grade 1 (2011 - dance); Arts education grade 2 (2011 - dance); Arts education grade 3 (2011 - dance); Arts education grade 1 (2011 - drama); Arts education grade 2 (2011 - drama); Arts education grade 3 (2011 - drama); Arts education grade 1 (2011 - music); Arts education grade 2 (2011 - music); Arts education grade 3 (2011 - music); Arts education grade 1 (2011 - visual art); Arts education grade 2 (2011 - visual art); Arts education grade 3 (2011 - visual art); Mathematics grade 1 (2007); Mathematics grade 2 (2009); Mathematics grade 3 (2009).

372.7 P637

Pilegard, Virginia Walton

The warlord's puzzle

Gretna, LA: Pelican Pub., 2000.

Subjects: Tangrams—Juvenile literature; Puzzles—Juvenile literature.

Summary: The origin of the tangram puzzle is described through this Chinese tale. Hoping to avoid punishment for breaking a beautiful tile that was his gift to a Chinese warlord, an artist suggests that the warlord hold a contest to see if anyone can mend it.

Notes: Mathematics grade 2 (2009); Mathematics grade 3 (2009); Mathematics grade 4 (2007); Mathematics grade 5 (2008).

372.7 P647

Pinczes, Elinor J.

My full moon is square

Boston, MA: Houghton Mifflin Company, 2002.

Subjects: Stories in rhyme; Books and reading—Juvenile fiction; Frogs—Juvenile fiction; Mathematics—Juvenile fiction.

Summary: A frog, who is an avid reader, is disappointed when a moonless night disrupts his bedtime reading. The fireflies assist the frog in his plight by creating different square formations to illuminate the pond. Various mathematical equations illustrate the fireflies' attempts to find a suitable arrangement for storytelling. The story is an opportunity to engage students in the investigation of multiplication arrays that create a square and the attributes of this geometric figure.

Notes: Mathematics grade 2 (2009); Mathematics grade 3 (2009).

372.7 P776

Pollman, Mary Jo

Blocks and beyond : strengthening early math and science skills through spatial learning

Baltimore, MD: Paul H. Brookes, 2010.

Subjects: Problem-based learning; Science—Study and teaching; Mathematics—Study and teaching.

Summary: Spatial development should be part of every young child's education, as it's linked with higher achievement not just in math and science, but across all academic areas. Now early childhood educators have a guidebook to help them seamlessly integrate spatial learning into their everyday curriculum. Focusing on areas key to academic success (math, science, art and literature, and social studies) the author gives teachers research-based insights and ready-to-use activities for promoting children's spatial development throughout the school day.

372.7 S189

Sammons, Laney; Boucher, Donna

Guided math workstations. Grades K-2

Huntington Beach, CA: Shell Education, 2018.

Subjects: Creative activities and seat work. Mathematics—Study and teaching (Primary).

Summary: This invaluable professional resource instructs teachers on how to implement Guided Math Workstations into K-2 classrooms successfully. With detailed instructions that are easily adopted into today's classrooms, this book contains everything teachers need to set up, plan, and manage workstations. It allows teachers to address their students' varied learning needs within a carefully planned numeracy-rich environment where students are challenged not just to do math, but to become mathematicians. Teachers will successfully be able to target the specific needs of learners with small-group lessons as students work independently on math workstation tasks. Each workstation task includes: an overview of the lesson, materials, objective, procedure, and

differentiation tactics; a Student Task card with directions and a materials list for the task to help with implementation and organization; a Talking Points card with math vocabulary words and sentence stems to encourage mathematical discourse; and additional resources for each task.

372.7 S225

SanGiovanni, John

Mine the gap for mathematical understanding. Grades K-2 : common holes and misconceptions and what to do about them

Thousand Oaks, CA: Corwin, 2017.

Subjects: Mathematics teachers—Training of. Mathematics—Study and teaching (Primary).

Summary: In this book, the author reminds us that mathematical mistakes are not random, and when we take the time to "mine the gap," we can dispel misunderstandings before they take root.

372.7 S332

Schielack, Jane F.

Mathematics in focus, K-6 : how to help students understand big ideas and make critical connections

Portsmouth, NH: Heinemann, 2010.

Subjects: Curriculum planning—Standards; Sixth grade (Education) —Curricula—Standards; Mathematics—Study and teaching (Elementary)—Standards.

Summary: The authors address a range of strategies that math leaders and teachers can use for instructional design that helps students achieve deeper understanding: prioritizing and combining mathematical ideas within tasks, making thoughtful selections of instructional tools, building relevance for mathematics, managing classroom conversations, building connections among multiple representations, allowing appropriate time for learning, using assessment effectively, and differentiating instruction.

372.7 S587

Silver, Anastasia Knechtel

Mastering grade 1 math : concepts and skills

Napanea, ON: On the Mark Press, 2014.

Subjects: Mathematics—Study and teaching (Primary).

Summary: This book is a complete, condensed course of instruction or review for Grade one mathematics. It is organized according to these five general curriculum threads: Number Sense & Numeration, Measurement, Geometry & Spatial Sense, Patterning & Algebra, and Data Management & Probability. Each topic area contains individual skills and concepts that match the learning expectations of the curriculum.

372.7 S587

Silver, Anastasia Knechtel

Mastering grade 2 math : concepts and skills

Napanea, ON: On the Mark Press, 2014.

Subjects: Mathematics—Study and teaching (Primary).

Summary: This book is a complete, condensed course of instruction or review for Grade two mathematics. It is organized according to these five general curriculum threads: Number Sense &

Numeration, Measurement, Geometry & Spatial Sense, Patterning & Algebra, and Data Management & Probability. Each topic area contains individual skills and concepts that match the learning expectations of the curriculum.

372.7 S587

Silver, Anastasia Knechtel

Mastering grade 3 math : concepts and skills

Napanee, ON: On the Mark Press, 2014.

Subjects: Mathematics—Study and teaching (Elementary).

Summary: This book is a complete, condensed course of instruction or review for Grade three mathematics. It is organized according to these five general curriculum threads: Number Sense & Numeration, Measurement, Geometry & Spatial Sense, Patterning & Algebra, and Data Management & Probability. Each topic area contains individual skills and concepts that match the learning expectations of the curriculum.

372.7 S613

Simpson, Jodi

Circle-time poetry. Math

New York, NY: Scholastic Teaching Resources, 2005.

Subjects: Poetry in mathematics education; Children's poetry; Mathematics—Study and teaching (Primary).

Summary: This book contains poems with activities that help young children build phonemic awareness, oral language, and early math skills.

372.7 S635

Small, Marian

Big ideas from Dr. Small. Grades K-3 : creating a comfort zone for teaching mathematics

Toronto, ON: Nelson Education, 2010.

Subjects: Mathematics—Study and teaching (Primary); Mathematics; Mathematics—Study and teaching (Elementary).

Summary: This series provides math teachers with what they need to know to teach the curriculum while focusing on the big ideas for each math concept. Each book includes hundreds of practical activities and follow-up questions to use in the classroom.

372.7 S635

Small, Marian

Big ideas from Dr. Small. Grades K-3, Facilitator's guide : creating a comfort zone for teaching mathematics

Toronto, ON: Nelson Education, 2010.

Subjects: Mathematics; Mathematics—Study and teaching (Elementary).

Summary: This facilitator's guide and DVD accompany the resource. Together they comprise a professional learning resource for teachers to learn more about the mathematics they teach and about how to teach more effectively using big ideas.

372.7 S635

Small, Marian

Building proportional reasoning across grades and math strands, K-8

New York, NY: Teachers College Press, 2015.

Subjects: Mathematics teachers—Training of. Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Middle school). Mathematics—Study and teaching (Primary).

Summary: Although proportional reasoning is not formally introduced as a topic in the Common Core and other mathematics curricula until 6th grade, introducing its fundamental ideas in the early grades helps students develop essential skills in ratios, percentages, and other proportional representations when they reach the upper grades. The author takes this complex subject and crafts examples and questions that help teachers see the larger purpose in teaching concepts, such as unitizing, and how that understanding is essential for more complex ideas, such as ratios. Teachers and vertical teams can see how the concepts can build year after year. This book suggests questions that are both interesting for students and useful for providing diagnostic information to teachers. Chapters are organized by grade level (K-8) around the Common Core State Standards for Mathematics to help teachers use the resource more easily.

372.7 S635

Small, Marian

Good questions : great ways to differentiate mathematics instruction

New York, NY: Teachers College Press, 2012.

Subjects: Mathematics—Study and teaching (Elementary); Individualized instruction.

Summary: This resource underscores the rationale for differentiating math instruction; describes two universal, easy-to-implement strategies designed to overcome the problems that teachers encounter; offers almost 300 questions and tasks that teachers and coaches can adopt immediately, adapt, or use as models to create their own; includes teaching tips and an organizing template at the end of each chapter to help readers build new tasks and open questions; and shows how to create a more inclusive classroom learning community with mathematical talk that engages participants from all levels.

372.7 S635

Small, Marian

Leaps and bounds towards math understanding 3/4. Student resource masters

Toronto, ON: Nelson Education, 2011.

Subjects: Mathematics—Study and teaching (Elementary), Remedial teaching.

Summary: This educational resource has been developed by many writers and consultants to bring the very best of mathematics to you.

372.7 S635

Small, Marian

Leaps and bounds towards math understanding 3/4. Teacher's resource

Toronto, ON: Nelson Education, 2011.

Subjects: Mathematics—Study and teaching (Elementary); Remedial teaching.

Summary: This book is a supplementary resource for students struggling in mathematics, Grades 3 to 8. Often these students are not struggling in other areas. This resource is designed to assist teachers in providing precise, targeted remediation for these students.

372.7 S635

Small, Marian

Making math meaningful for Canadian students, K-8

Toronto, ON: Nelson Education, 2009.

Subjects: Mathematics—Study and teaching (Elementary)—Canada.

Summary: Suitable for teachers who often have not had specialist training in mathematics, this book helps to start teachers on their way to a successful career in teaching mathematics by providing them with insight into how to make mathematics make sense to students and capture their interest.

372.7 S635

Small, Marian

Open questions for rich math lessons. Grades K-3 : number strand

Toronto, ON: Rubicon, 2016.

Subjects: Mathematics—Study and teaching (Primary).

Summary: This book provides open questions for the three parts of a problem-solving lesson. These questions are designed to enrich, enhance, and extend any core math program.

372.7 S725

Sousa, David A.

Brain-compatible activities for mathematics, grades 2-3

Thousand Oaks, CA: Corwin Press, 2010.

Subjects: Mathematics—Study and teaching (Primary).

Summary: Through activities such as Jumping Jelly Beans, Math Hockey, and Treasure Hunt, young learners will enjoy developing skills connected with number patterns and place value, multi-digit addition and subtraction, multiplication and division, fractions, measurement, geometry, and more. Grades 2-3.

372.7 S725

Sousa, David A.

Brain-compatible activities for mathematics, grades K-1

Thousand Oaks, CA: Corwin Press, 2010.

Subjects: Mathematics—Study and teaching (Preschool). Mathematics—Study and teaching (Primary).

Summary: Through activities such as Number Jingle and Math Detective, young learners will enjoy developing skills connected with whole numbers, addition and subtraction, geometrical shapes, measurement, number patterns, and more.

372.7 T164

Tang, Greg

Math appeal : mind-stretching math riddles

New York, NY: Scholastic Press, 2003.

Subjects: Mathematics—Juvenile literature; Mathematical recreations.

Summary: This resource features riddles that demonstrate mental calculation strategies in context. Each two-page spread poses a mathematical problem with a helpful hint for developing

computational fluency in addition. The accompanying illustration depicts a pattern to help readers visualize the strategy.

372.7 T164

Tang, Greg

Math fables : lessons that count

New York, NY: Scholastic, 2004.

Subjects: Mathematics—Juvenile literature; Counting—Juvenile literature.

Summary: A series of rhymes about animals introduces counting and grouping numbers, as well as examples of such behaviors as cooperation, friendship, and appreciation.

372.7 T243

Taylor-Cox, Jennifer

Differentiating in algebra : PreK-grade 2

Portsmouth, NH: Heinemann, 2008.

Subjects: Classroom management; Mathematical readiness; Individualized instruction; Algebra—Study and teaching (Elementary); Algebra—Study and teaching (Early childhood).

Summary: This book helps you assess students' math abilities quickly and efficiently, group children by need, target instruction to meet every student's needs, and adjust levels of cognitive demand.

372.7 T243

Taylor-Cox, Jennifer

Differentiating in data analysis and probability : PreK-grade 2

Portsmouth, NH: Heinemann, 2008.

Subjects: Probabilities—Study and teaching (Early childhood); Probabilities—Study and teaching (Elementary); Classroom management; Individualized instruction; Mathematical readiness.

Summary: This book helps you to assess students' math abilities quickly and efficiently, group children by need, target instruction to meet every student's needs, and adjust levels of cognitive demand.

372.7 T243

Taylor-Cox, Jennifer

Differentiating in geometry : PreK-grade 2

Portsmouth, NH: Heinemann, 2008.

Subjects: Mathematical readiness; Algebra—Study and teaching (Early childhood); Classroom management; Algebra—Study and teaching (Elementary); Individualized instruction.

Summary: This book helps you to assess students' math abilities quickly and efficiently, group children by need, target instruction to meet every student's needs, and adjust levels of cognitive demand.

372.7 T243

Taylor-Cox, Jennifer

Differentiating in measurement : PreK-grade 2

Portsmouth, NH: Heinemann, 2008.

Subjects: Measurement—Study and teaching (Early childhood); Classroom management; Measurement—Study and teaching (Elementary); Mathematical readiness; Individualized instruction.

Summary: This book helps you to assess students' math abilities quickly and efficiently, group children by need, target instruction to meet every student's needs, and adjust levels of cognitive demand.

372.7 T243

Taylor-Cox, Jennifer

Differentiating in number & operations and the other math content standards : preK-grade 2

Portsmouth, NH: Heinemann, 2008.

Subjects: Arithmetic—Study and teaching (Early childhood); Arithmetic—Study and teaching (Elementary); Number concept—Study and teaching (Early childhood); Number concept—Study and teaching (Elementary); Classroom management; Individualized instruction; Mathematical readiness.

Summary: This book introduces the foundational elements of differentiated teaching through working with number and operations. The author's approach allows you to assess students' math abilities quickly & efficiently; group children by need, just as you do for guided reading; target instruction to meet every student's needs; and adjust levels of cognitive demand.

372.7 T243

Taylor-Cox, Jennifer

Math intervention. Grades 3-5 : building number power with formative assessments, differentiation, and games

Larchmont, NY: Eye on Education, 2009.

Subjects: Mathematics—Study and teaching (Elementary); Number concept in children.

Summary: Help all of your students reach success in math. This practical book is filled with suggestions for targeting instruction to struggling students in grades 3-5. You'll learn how to diagnose weaknesses, differentiate instruction, use formative assessments, offer corrective feedback, and motivate students with games and activities.

372.7 T243

Taylor-Cox, Jennifer

Math intervention. Grades PreK-2 : building number power with formative assessments, differentiation, and games

Larchmont, NY: Eye on Education, 2009.

Subjects: Mathematics—Study and teaching (Early childhood); Mathematics—Study and teaching (Primary); Number concept in children.

Summary: Help all of your students reach success in math. This practical book is filled with suggestions for targeting instruction to struggling students in PreK-2. You'll learn how to diagnose weaknesses, differentiate instruction, use formative assessments, offer corrective feedback, and motivate students with games and activities.

372.7 T253

Stepanek, Jennifer (Ed.)

Teaching by design in elementary mathematics. Grades 2-3

Thousand Oaks, CA: Corwin Press, 2011.

Subjects: Mathematics—Study and teaching (Primary). Teaching teams.

372.7 T253

Lester, Frank K. (Ed.)

Teaching mathematics through problem solving : prekindergarten-grade 6

Reston, VA: National Council of Teachers of Mathematics, 2003.

Subjects: Mathematics—Study and teaching (Early childhood); Problem-based learning; Mathematics—Study and teaching (Elementary).

Summary: This volume promotes a problem-solving approach to mathematics instruction. This approach engages students in making sense of problematic tasks in which mathematical concepts are embedded. The writers address issues and perspectives related to this approach (including the role of technology), and provide examples of its use in the classroom.

Notes: Kindergarten curriculum renewal; Mathematics grade 1 (2007); Mathematics grade 2 (2009); Mathematics grade 3 (2009); Mathematics grade 4 (2007); Mathematics grade 5 (2008); Mathematics grade 6 (2009).

372.7 T253

Teaching student-centered mathematics : developmentally appropriate instruction for grades pre-K-2

Boston, MA: Pearson, 2014.

Subjects: Mathematics—Study and teaching (Primary).

Summary: Each volume of this series focuses on the content relevant to a specific grade band and provides additional information on creating an effective classroom environment, engaging families, and aligning teaching to the Common Core State Standards. Additional activities and expanded lessons are also included. The series has three objectives: 1. To illustrate what it means to teach student-centered, problem-based mathematics; 2. To serve as a reference for the mathematics content and research-based instructional strategies suggested for grades six to eight; and 3. To present a large collection of high-quality tasks and activities that can engage students in the mathematics that is important for them to learn.

372.7 T628

Tobey, Cheryl Rose; Fagan, Emily R.

Uncovering student thinking about mathematics in the Common Core, grades K-2 : 20 formative assessment probes

Thousand Oaks, CA: Corwin, 2013.

Subjects: Individualized instruction; Mathematical ability—Evaluation; Effective teaching; Mathematics—Study and teaching (Early childhood).

Summary: Take the guesswork out of grades 3-5 math assessment. Quickly pinpoint and reverse your students' common math difficulties with this detailed and easy-to-follow resource. Twenty research-based assessment probes help you ask the right questions to uncover just where your students get confused, while learning is already underway.

372.7 T942

Turnbull, Demetra; Vanden Heuvel, Rita

Canadian math success 1

Toronto, ON: Chalkboard Publishing, 2014.

Subjects: Teaching—Aids and devices; Creative activities and seat work; Mathematics—Study and teaching (Elementary).

Summary: This book includes basic number skills, mental math strategies, patterning and algebra, measurement, geometry, and graphing.

372.7 T942

Turnbull, Demetra; Vanden Heuvel, Rita

Canadian math success 2

Toronto, ON: Chalkboard Publishing, 2014.

Subjects: Mathematics—Study and teaching (Elementary); Teaching—Aids and devices; Creative activities and seat work.

Summary: This book includes basic number skills, mental math strategies, patterning and algebra, measurement, geometry, and graphing.

372.7 T942

Turnbull, Demetra; Vanden Heuvel, Rita

Canadian math success 3

Toronto, ON: Chalkboard Publishing, 2014.

Subjects: Mathematics—Study and teaching (Elementary); Creative activities and seat work.

Summary: This book includes: basic number skills, mental math strategies, patterning and algebra, measurement, geometry, and graphing.

372.7 T942

Turnbull, Demetra; Vanden Heuvel, Rita

Canadian multiplication skills success. Grades 3-4

Toronto, ON: Chalkboard Publishing, 2014.

Subjects: Multiplication—Study and teaching (Elementary); Teaching—Aids and devices; Creative activities and seat work; Mathematics—Study and teaching (Elementary).

Summary: These activities are designed to help reinforce essential math skills with consistent practice. The activities are ideal for individual use or as a class exercise.

372.7 T942

Turnbull, Demetra

Canadian subtraction skills success. Grades 1-3

Toronto, ON: Chalkboard Publishing, 2014.

Subjects: Creative activities and seat work; Mathematics—Study and teaching (Elementary); Subtraction—Study and teaching (Elementary); Teaching—Aids and devices.

Summary: These activities in this book are designed to help reinforce essential math skills with consistent practice. The activities are ideal for individual use or as a class exercise.

372.7 V217

Van de Walle, John A.

Teaching student-centered mathematics. Grades K-3

Boston, MA: Pearson/Allyn and Bacon, 2006.

Subjects: Mathematics—Study and teaching (Primary).

Summary: This resource contains nearly 200 grade-appropriate activities, designed to help students develop real understanding and confidence in mathematics. Topics include: foundations of student-centred instruction, developing early number concepts and number sense, developing meaning for the operations and solving-story problems, base-ten concepts and place value, strategies for whole-number computation, early fraction concepts, helping children use data, and more.

Notes: Mathematics kindergarten (2007). Mathematics Grade 2 (2008). Mathematics Grade 3 (2009).

372.7 V217

Van de Walle, John A.; Lovin, LouAnn H.

Teaching student-centered mathematics. Grades PreK-2

New York, NY: Pearson, 2018.

Subjects: Mathematics—Study and teaching (Preschool). Mathematics—Study and teaching (Primary).

Summary: Designed for classroom teachers, this book focuses on specific grade bands and includes information on creating an effective classroom environment, aligning teaching to various standards and practices, such as the Common Core State Standards and NCTM's teaching practices, and engaging families. The first portion of the book addresses how to build a student-centered environment in which children can become mathematically proficient, while the second portion focuses on practical ways to teach important concepts in a student-centered fashion.

372.7 V242

VanderWeide, Donna

Differentiated math : tools and activities to get students moving, thinking & learning

Peterborough, NH: Crystal Springs Books, 2008.

Subjects: Individualized instruction. Mathematics—Study and teaching (Primary).

Summary: The author shows you how to apply differentiation principles to math class. This book is packed with songs, games, and literature connections. The author offers a training camp for graphs and glyphs, task cards to give students choices, and loads of reproducibles to simplify preparation, planning, and assessment.

372.7 W373

Weber, Chris; Crane, Darlene

Strategies for mathematical instruction and intervention. K-5

Bloomington, IN: Solution Tree Press, 2015.

Subjects: Curriculum planning; Mathematics—Study and teaching (Elementary).

Summary: Prepare students to move forward in mathematics learning, and ensure their continued growth in critical thinking and problem solving. In this book, the authors assert that framing mathematics education with an RTI model is essential in order to equip teachers with the instruction, assessment, and intervention strategies necessary to meet the complex, diverse needs of students.

372.7 W833

Witzel, Bradley S.; Little, Mary E.

Teaching elementary mathematics to struggling learners

New York, NY: Guilford Press, 2016.

Subjects: Learning disabled children. Mathematics—Study and teaching (Elementary).

Summary: The authors present empirically validated practices for supporting students with disabilities and others experiencing difficulties in specific areas of math, including problem solving, early numeracy, whole-number operations, fractions, geometry, and algebra.

372.7 Y43

Yeh, Cathery; Ellis, Mark W.

Reimagining the mathematics classroom : creating and sustaining productive learning environments, K-grade 6

Reston, VA: National Council of Teachers of Mathematics, 2017.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary). School improvement programs.

Summary: This book presents a comprehensive systems approach to examining mathematics teaching. This volume synthesizes and illustrates current research on the essential elements of mathematics teaching and learning, unpacking each component. In addition, tips on using technology to assess and enhance learning are embedded throughout the book.

372.7044 C434

Chaille, Christine; Davis, Sara McCormick

Integrating math and science in early childhood classrooms through big ideas : a constructivist approach

Boston, MA: Pearson, 2016.

Subjects: Mathematics—Study and teaching (Early childhood).

Summary: In this book, the authors focus on big ideas—like patterns, transformation, movement, balance, and relationships—as a way to think about content, and they integrate science and mathematics through these big ideas, rather than linking them topically. The book looks at why it is important to think about thinking, introduces assessment early to help the teacher plan for assessment before teaching even begins, and sets up an environment that will support the construction of the big ideas that integrate math and science. Real-life scenarios provide invaluable insights into the teacher's thinking and planning, and each chapter includes two modules to be used for in-depth exploration of different aspects of the big ideas. It's a unique exploration of thinking and learning.

372.7044 D621

Dixon, Juli K.; Nolan, Edward C.

Making sense of mathematics for teaching grades K-2

Bloomington, IN: Solution Tree Press, 2016.

Subjects: Mathematics—Study and teaching (Primary). Mathematics—Study and teaching.

372.7044 H251

Henry, Lucia Kemp

Now I know my number learning mats

New York, NY: Teaching Resources, 2012.

Subjects: Mathematics—Study and teaching (Early childhood); Numbers—Study and teaching (Early childhood); Counting—Study and teaching (Early childhood).

Summary: These ready-to-use activity mats give young children the focused practice they need to really learn their numbers. Each double-sided mat targets a number from 1 to 30, an increment of 10 up to 100, or a key number concept. Skills include number recognition, number formation, counting, number words, comparing quantities to numbers, comparing sets, sequencing, as well as following directions. Great for independent work, centers, and homework. For use with Grades PreK-1.

372.7044 K93

Krpan, Cathy Marks

Teaching math with meaning : cultivating self-efficacy through learning competencies, Grades K-8

North York, ON: Pearson Canada, 2018.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Middle school). Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

Summary: The author believes that through competency-based learning, students and teachers alike can deepen their mathematical understanding and share and impart that knowledge in and out of the math classroom. This book takes a practical approach to embedding this deep learning in K to Grade 8 mathematics classrooms.

372.7044 L561

Lempp, Jennifer

Math workshop : five steps to implementing guided math, learning stations, reflection, and more, grades K-5

Sausalito, CA: Math Solutions Publications, 2017.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary). Teaching—Aids and devices.

Summary: Successfully implement the transformational math workshop model of instruction through five accessible, manageable steps: Understand Math Workshop, Prepare Your Students for Math Workshop, Decide Your Math Workshop Structure, Facilitate Your Math Workshop, and Reflect on and Refine Your Math Workshop.

372.7049 R288

Battista, Michael T. (Ed.)

Reasoning and sense making in the mathematics classroom, grades 3-5

Reston, VA: National Council of Teachers of Mathematics, 2017.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary). Problem solving.

Summary: Based on extensive research conducted by the authors, this book is designed to help classroom teachers understand, monitor, and guide the development of students' reasoning and sense making about core ideas in elementary school mathematics.

372.7049 R288

Battista, Michael T. (Ed.)

Reasoning and sense making in the mathematics classroom, preK-grade 2

Reston, VA: National Council of Teachers of Mathematics, 2016.

Subjects: Algebra—Study and teaching (Primary). Geometry—Study and teaching (Primary). Logic, Symbolic and mathematical—Study and teaching (Primary). Mathematics—Study and teaching (Primary). Proof theory—Study and teaching (Primary).

Summary: Based on extensive research conducted by the authors, this book is designed to help classroom teachers understand, monitor, and guide the development of students' reasoning and sense making about core ideas in elementary school mathematics. It illustrates the nature of these skills using classroom vignettes and actual student work in conjunction with instructional tasks and learning progressions.

372.71 S635

Small, Marian

Uncomplicating algebra to meet Common Core Standards in math, K-8

New York, NY: Teachers College Press, 2014.

Subjects: Mathematics—Study and teaching (Elementary)—Standards; Mathematics—Study and teaching (Primary)—Standards; Algebra—Study and teaching (Elementary)—Standards; Algebra—Study and teaching (Primary)—Standards.

Summary: This book opens with a clear discussion of algebraic thinking and current requirements for algebraic understanding within standards-based learning environments. Beginning with Kindergarten, where the first relevant standard is found in the operations and algebraic thinking domain, and ends with Grade 8, where the focus is on working with linear equations and functions.

372.72 L331

LaRose, Denise

Early childhood mathematics activities. Grades PreK-1

Huntington Beach, CA: Shell Education, 2010.

Subjects: Arithmetic—Study and teaching (Early childhood); Arithmetic—Study and teaching (Primary).

Summary: Help students develop literacy and language skills through research-based, student-centered mathematics activities. A teacher resource CD is provided that contains all of the activities in full colour.

372.72 S562

Shumway, Jessica F.

Go figure! : number sense routines that build mathematical understanding [DVD]

Portland, ME: Stenhouse Publishers, 2014.

Subjects: Mathematics—Study and teaching (Preschool). Mathematics—Study and teaching (Primary).

Summary: For Grade K-5 teachers.

372.72 S562

Shumway, Jessica F.

Number sense routines : building numerical literacy every day in grades K-3

Portland, ME: Stenhouse Publishers, 2011.

Subjects: Mathematics—Study and teaching (Primary).

Summary: The author shows that number sense can be taught to all students. Dozens of classroom examples — including conversations among students engaging in number sense routines — illustrate how the routines work, how children's number sense develops, and how to implement responsive routines.

372.72 S562

Shumway, Jessica F.

Number sense routines : building mathematical understanding every day in grades 3-5

Portland, ME: Stenhouse Publishers, 2018.

Subjects: Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary).

Summary: This book is about tapping into every child's innate number sense and providing daily, connected experiences that are responsive to children's learning needs. Through familiar five-, ten-, or fifteen-minute warm-up routines, the author offers both beginner and veteran teachers easy and effective ways to build and solidify students' number sense foundations. No matter how familiar the routine, the author infuses each with new joy, depth, and life. She reveals the careful thinking and planning that goes into each routine and provides detailed vignettes and dialogues demonstrating how they unfold in real classrooms. She gives teachers a clear view into her nuanced facilitation. Each routine becomes an exciting opportunity to understand where students are in their understanding and to help students articulate and extend their mathematical thinking.

372.72 S635

Small, Marian

Uncomplicating fractions to meet Common Core Standards in math, K-7

New York, NY: Teachers College Press, 2014.

Subjects: Fractions—Study and teaching (Elementary).

Summary: The author shows teachers how to uncomplicate the teaching of fractions by focusing on the most important fraction ideas that students need to grasp. The book is organized by grade level beginning with Grade 1, where the first relevant standard is found in the geometry domain, and ending with Grade 7, where the focus is on operations with rational numbers and proportional thinking. In each section, the relevant standard is presented, followed by a discussion of important underlying ideas associated with that standard, as well as some thoughtful, concept-based questions that can be used for classroom instruction, practice, or assessment.

372.72 S719

Souders, Taryn

Whole-y cow! Fractions are fun

Ann Arbor, MI: Sleeping Bear Press, 2010.

Subjects: Fractions—Juvenile literature; Mathematics—Juvenile poetry.

Summary: This book provides lessons in fractions through the antics of a patriotic, ice cream-eating, cello-playing cow.

372.72 W952

Wright, Robert J.

Early numeracy : assessment for teaching and intervention

Thousand Oaks, CA: Sage, 2000.

Subjects: Numeracy—Study and teaching (Elementary); Learning strategies.

Summary: The assessment tools in this revised edition help teachers identify children's difficulties and misconceptions and become more skilled and confident in planning programs for intervention and monitoring children's progress.

372.76 C564

Chval, Kathryn B.; Lannin, John

Putting essential understanding of geometry and measurement into practice in grades 3-5

Reston, VA: National Council of Teachers of Mathematics, 2016.

Subjects: Geometry—Study and teaching (Elementary). Geometry—Study and teaching (Primary). Mathematics—Study and teaching (Elementary). Mathematics—Study and teaching (Primary).

Summary: This book focuses on the specialized pedagogical content knowledge that you need to teach geometry and measurement effectively in grades 3-5. The authors demonstrate how to use this multifaceted knowledge to address the big ideas and essential understanding that students must develop for success with geometry and measurement.

372.76 N495

Neuschwander, Cindy

Sir Cumference and the great knight of Angleland : a math adventure

Watertown, MA: Charlesbridge, 2001.

Notes: Mathematics grade 4 (2007); Mathematics grade 5 (2008); Mathematics grade 6 (2009).

Subjects: Geometry—Juvenile literature.

Summary: To earn his knighthood, Radius must find and rescue a missing king. His father, Sir Cumference, and his mother, Lady Di of Ameter, give him a circular medallion (a protractor) that he uses to find his way through a maze of many angles.

419 G476

Gillen, Patricia Bellan

My signing book of numbers

Washington, DC: Kendall Green Pub., 1988.

Subjects: Counting—Juvenile literature; Sign language—Juvenile literature.

Summary: This full-colour picture book helps children learn their numbers in sign language. Each two-page spread of this delightfully illustrated book has the appropriate number of things or creatures for the numbers 0 through 20. The signs for the numbers 30, 40, 50, 60, 70, 80, 90, and 100 are also included. Each sign/number appears in the corner of the page. Written explanations of how to form each sign are provided in the back of the book.

428.24 B843

Bresser, Rusty

Supporting English language learners in math class, grades K-2

Sausalito, CA: Math Solutions Publications, 2009.

Subjects: English language—Study and teaching (Primary)—Foreign speakers. English language—Study and teaching as a second language (Primary). Mathematics—Study and

teaching (Primary).

Summary: The lessons in this book guide teachers of primary grades in developing students' proficiency in English while also developing their mathematical understanding. In addition, teachers learn how to modify existing math lessons to support students with varying degrees of English language proficiency.

428.24 M235

Making math accessible to English language learners. Grades K-2 : practical tips and suggestions

Bloomington, IN: Solution Tree Press, 2009.

Subjects: English language—Study and teaching (Primary)—Foreign speakers. English language—Study and teaching as a second language (Primary). Mathematics—Study and teaching (Primary).

Summary: This resource provides classroom tips and suggestions to strengthen the quality of classroom instruction for teachers. These tips are based on research in practices and strategies that address the affective, linguistic, and cognitive needs of ELLs. Grades K-2.

510 M464 OVERSIZE

Monsters think

Edmonton, AB: Edmonton Public Schools, 2007.

Subjects: Size perception—Juvenile literature; Mathematics—Study and teaching (Preschool); Space perception—Juvenile literature.

Summary: Mathematics Kindergarten.

510 M464 OVERSIZE

Mr. Buttons

Edmonton, AB: Edmonton Public Schools, 2007.

Subjects: Counting—Juvenile literature; Mathematics—Study and teaching (Preschool).

Summary: Mathematics Kindergarten.

510 S399

Schwartz, David M.

G is for googol : a math alphabet book

Berkeley, CA: Tricycle Press, 1998.

Subjects: Mathematics—Juvenile literature.

Summary: This book explains the meaning of mathematical terms which begin with the different letters of the alphabet from abacus, binary, and cubit to zillion.

Notes: Mathematics Kindergarten (2007); Mathematics grade 1 (2007); Mathematics grade 2 (2008); Mathematics grade 3 (2009); Mathematics grade 4 (2007); Mathematics grade 5 (2008); Mathematics grade 6 (2009); Mathematics grade 7 (2007); Mathematics grade 8 (2008); Mathematics grade 9 (2009).

510.7 C456

Fast, Gerald R. (Ed)

Changing the faces of mathematics : perspectives on Indigenous people of North America

Reston, VA: National Council of Teachers of Mathematics, 2002.

Subjects: Indians of North America—Education; Mathematical ability; Mathematics—Study and teaching—Social aspects.

Summary: This resource is a collection of essays related to teaching mathematics in a culturally relevant way to First Nations people of North America. Examples include suggestions for teaching numbers and operations concepts using traditional games, and for introducing students to a variety of number systems specific to North American First Nations people.

Notes: Aboriginal Resource List; Prekindergarten curriculum; Mathematics Kindergarten (2007). Mathematics Grade 1 (2007); Mathematics Grade 2 (2008); Mathematics Grade 3 (2009); Mathematics Grade 4 (2007); Mathematics Grade 5 (2008); Mathematics Grade 6 (2009); Mathematics Grade 7 (2007); Mathematics Grade 8 (2008); Mathematics Grade 9 (2009); Mathematics 10 - Foundations and Pre-calculus (2010); Mathematics 10 - Workplace and Apprenticeship (2010); Mathematics 20 - Foundations (2010); Mathematics 20 - Pre-calculus (2010); Mathematics 20 - Workplace and Apprenticeship (2010); Mathematics 30 – Foundations (2012); Mathematics 30 – Pre-calculus (2012); Mathematics 30 - Workplace and Apprenticeship (2012); Calculus 30 (2012).

510.71 S635

Small, Marian

Eyes on math : a visual approach to teaching math concepts

New York, NY: Teachers College Press, 2013.

Subjects: Pictures in education; Mathematics—Study and teaching—Audio-visual aids.

Summary: This book is a unique teaching resource that provides engaging, full-colour graphics and pictures with text showing teachers how to use each image to stimulate mathematical teaching conversations around key K-8 concepts. Teachers using the book can download the images for projection onto classroom white boards or screens. The questions and answers will help both students and teachers look more deeply and see the math behind the math.

510.71 T175

Tapper, John

Solving for why : understanding, assessing, and teaching students who struggle with math, Grades K-8

Sausalito, CA: Math Solutions, 2012.

Subjects: Mathematics—Study and teaching (Middle school); Mathematics—Study and teaching (Elementary).

Summary: This resource takes an RTI (Response to Intervention)-like approach to supporting struggling learners. The idea is to solve for why, to gain insight into student understanding through frequent assessment and communication with students. It's remarkably different from recipe-type approaches that assume the same solution applies to learners with similar struggles. Rather, the solutions to mathematical struggles are often revealed from a rich understanding of each individual learner.

513.2 A615

Anno, Mitsumasa

Anno's counting book

New York, NY: HarperCollins, 1977, 1975.

Notes: Prekindergarten curriculum; Mathematics kindergarten (2007); Mathematics grade 1 (2007).

Subjects: Country life—Juvenile fiction; Stories without words; Counting; Seasons—Juvenile fiction.

Summary: This is a wordless counting book depicting the growth in a village and surrounding countryside during twelve months.

513.2 B996

May, David C. (Ed)

Byron and his balloon : an English-Chipewyan counting book

Edmonton, AB: Tree Frog Press, 1984.

Subjects: Counting—Juvenile literature.

Summary: This book contains text in English and Chipewyan. It began as a Grade One project: Lynn Atkins told her class of Chipewyan children to paint pictures from their day, using the numbers one to ten. Come float with Byron as he visits his friends, the children of La Loche in this, their very own counting book.

513.214 P647

Pinczes, Elinor J.

One hundred hungry ants

Boston, MA: Houghton Mifflin Harcourt, 1993.

Subjects: Ants—Juvenile fiction. Division—Juvenile fiction. Mathematics—Study and teaching (Primary). Stories in rhyme.

Summary: One hundred hungry ants scurry to partake in an afternoon picnic. The colony of ants reforms their marching lines several times in their endeavour to arrive at a faster rate. The marching verses and illustrated arrays combine to create a resource for introducing factors of 100 and division concepts.

Notes: Mathematics grade 2 (2009).

519.544 G624

Goldstone, Bruce

Great estimations

New York, NY: Henry Holt, 2006.

Subjects: Estimation theory—Juvenile literature.

Summary: Using a variety of photographed objects, the author helps readers to develop their estimation strategies by first looking at groups of ten, one hundred, and one thousand. Numerous opportunities are provided for students to use groupings and patterns to estimate quantities of colourful everyday objects. Each picture includes hints for helpful estimation strategies.

Notes: Mathematics grade 2 (2008); Mathematics grade 3 (2009); Mathematics grade 4 (2007); Mathematics grade 5 (2008).

811.54 B887

Bruchac, Joseph

Thirteen moons on turtle's back : a Native American year of moons

New York, NY: Putnam & Grosset, 1997.

Subjects: Indians of North America—Legends—Juvenile poetry; Children's poetry.

Summary: In this Native American legend, the thirteen scales on Old Turtle's back hold the key to the thirteen cycles of the moon and the changing seasons. These lyrical poems and striking paintings celebrate the wonder of the seasons, from the Northern Cheyenne's Moon of the Popping Trees to the Big Moon of the Abenaki.

Notes: Aboriginal Resource List. Mathematics K-5.

FR 372.7 S635

Small, Marian

À pas de géant vers une meilleure compréhension des maths, 3/4. Fiches reproductibles et solutionnaire [CD-ROM]

Montreal, QC: Modulo, 2012.

Subjects: French language materials; Remedial teaching; Mathematics—Study and teaching (Elementary).

Summary: 3e et 4e année.

FR 372.7 S635

Small, Marian

À pas de géant vers une meilleure compréhension des maths, 3/4. Ressources numériques pour l'enseignement sur DVD [DVD]

Montreal, QC: Modulo, 2012.

Subjects: French language materials; Mathematics—Study and teaching (Elementary); Remedial teaching.

Summary: 3e et 4e année

