Early Childhood Mathematics Activities Early Childhood Activities

The foundation for science, technology, engineering, and mathematics (STEM) education begins in the early years. This book provides more than ninety activities and learning center ideas that seamlessly integrate STEM throughout early childhood classrooms. These hands-on STEM experiences enhance cooking, art, and music activities, block play and sensory table exploration, and field trips and outdoor time. Information on assessment and early learning standards is also provided. Sally Moomaw, EdD, has spent much of her career researching and teaching STEM education. She is an assistant professor at the University of Cincinnati and the author of several early education books.

'The book is grounded in the latest research about how children become effective learners, particularly in relation to mathematics. Bringing together research and practice in an accessible way, Kate Tucker provides an essential resource for all those who work with young children. I strongly recommend it!' - Dr Sue Rogers, Head of Department of Early years and Primary Education, Institute of Education Offering practical examples of focused, playful teaching this popular book is back for a third edition, with even more activities to use in your setting with children aged from 3 to 8. Completely updated to include the revised Early Years Foundation Stage, this new edition covers all the hot topics in the field, and now includes: a new section on teaching mathematics in Forest School more coverage of using ICT to teach mathematics more coverage of children with Special Educational Needs (SEN) a key vocabulary section at the end of each chapter, and a detailed glossary expanded and updated suggestions for Further Reading even more activities to use in lessons, with some extended to include 7-8 year olds With a user-friendly layout, this new edition is an ideal resource for practitioners wishing to enhance their mathematics teaching, and for students wishing to develop their knowledge and understanding of how to use play to teach mathematics. Kate Tucker is an early years teacher, trainer and writer based in Devon.

A simple and fun to weave counting and other math concepts into everyday activities.

PERFECT FOR EARLY CHILDHOOD EDUCATORS, CARE GIVERS AND

PARENTS ALIKE, this reality based book provides a wide selection of activities and investigations for young children. Multi-level activities introduce increasingly advanced skills for preschool through third grade and have been designed to promote mathematical reasoning, communication, and problem solving skills that excite young learners.

Early Childhood

The Young Child and Mathematics, Third Edition

Educating Our Preschoolers

Content-Area Learning

Teaching STEM in the Early Years

Principles to Actions

"Much of the content in this book is adapted from Teaching Young Children (TYC), NAEYC's award-winning magazine ..."--Page [104]

This text offers guidance to teachers, mathematics coaches, administrators, parents, and policymakers. This book: provides a research-based description of eight essential mathematics teaching practices ; describes the conditions, structures, and policies that must support the teaching practices ; builds on NCTM's Principles and Standards for School Mathematics and supports implementation of the Common Core State Standards for Mathematics to attain much higher levels of mathematics achievement for all students ; identifies obstacles, unproductive and productive beliefs, and key actions that must be understood, acknowledged, and addressed by all stakeholders ; encourages teachers of mathematics to engage students in mathematical thinking, reasoning, and sense making to significantly strengthen teaching and learning.

Noting that young children are capable of surprisingly complex forms of mathematical thinking and learning, this book presents a collection of articles depicting children discovering mathematical ideas, teachers fostering students' informal mathematical knowledge, adults asking questions and listening to answers, and researchers examining children's mathematical thinking. The chapters are: (1) "Why Do We Teach Young Children So Little Mathematics? Some Historical Considerations" (Balfanz); (2) "Children's Ways of Knowing: Lessons from Cognitive Development Research" (Sophian); (3) "The Sociology of Day Care" (McDill and Natriello); (4) "Cultural Aspects of Young Children's Mathematics Knowledge" (Guberman); (5) "Ready To Learn: Developing Young Children's Mathematical Powers" (Greenes); (6) "The Development of Informal Counting, Number, and Arithmetic Skills and Concepts" (Baroody and Wilkins); (7) "Geometric and Spatial Thinking in Young Children" (Clements); (8) "Rational-Number Learning in the Early Years: What Is Possible?" (Hunting); (9) "Young Children

Doing Mathematics: Observations of Everyday Activities" (Ginsburg, Inoue, and Seo); (10) "Cognitively Guided Instruction in One Kindergarten Classroom" (Warfield and Yttri); (11) "Supporting Students' Ways of Reasoning about Patterns and Partitions" (McClain and Cobb); (12) "The Effective Use of Computers with Young Children" (Clements); (13) "Making Connections: A 'Number Curriculum' for Preschoolers" (Shane); (14) "Within Easy Reach: Using a Shelf-Based Curriculum To Increase the Range of Mathematical Concepts Accessible to Young Children" (Nelson); (15) "Teaching Mathematics through Musical Activities" (Kim); (16) "The Boston University--Chelsea Project" (Greenes); (17) "The Outdoors as a Context for Mathematics in the Early Years" (Basile); (18) "Using Storybooks To Help Young Children Make Sense of Mathematics" (Hong); (19) "Movement, Mathematics, and Learning: Experiences Using a Family Learning Model" (Coates and Franco); (20) "Math in Motion" (Goodway, Rudisill, Hamilton, and Hart); (21) "Assessing the Mathematical Understanding of the Young Child" (Copley); (22) "Improving Opportunities and Access to Mathematics Learning in the Early Years" (Padron); (23) "What To Do When They Don't Speak English: Teaching Mathematics to English-Language Learners in the Early Childhood Classroom" (Weaver and Gaines); (24) "Involving Parents of Four- and Five-Year-Olds in Their Children's Mathematics Education: The FAMILY MATH Experience" (Coates and Thompson); (25) "Perspectives on Mathematics Education and Professional Development through the Eyes of Early Childhood Administrators" (Weber); and (26) "Early Childhood Mathematics in Japan" (Hatano and Inagaki). (Each chapter contains references.) (KB)

Mathematical activities for parents and their 2- to 5-year-old children.

Teaching Mathematics In Early Childhood

Shape Activities

Research, Reflexive Practice and Innovative Pedagogy

Early Childhood Teachers' Professional Competence in Mathematics

101 Math Activities

Preschool Math

These engaging hands-on math activities provide students with hours of fun-filled learning experiences throughout the year. The activities are in an easy-to-follow format and require little preparation time and few materials.

Teaching Mathematics in Early Childhood: Simple Activities That Make Learning Math Easy and Fun has over 200 activities, tips, and resources. It will give you fun playful activities to expose children ages, 0-5, to the following concepts....ColorsShapesSpatial ReasoningSorting and OrganizingNumber Recognition and CountingEstimationMeasurementAddition and SubtractionSkip Counting and MultiplicationMoney RecognitionTimeMany of the activities can be

done with household items and materials. This book also gives its readers tips and resources such as children's book suggestions, videos, music, toys, and playful materials.

In this important new book for pre- and in-service teachers, early math experts Douglas Clements and Julie Sarama show how "learning trajectories" help teachers become more effective professionals. By opening up new windows to seeing young children and the inherent delight and curiosity behind their mathematical reasoning, learning trajectories ultimately make teaching more joyous. They help teachers understand the varying level of knowledge and thinking of their classes and the individuals within them as key in serving the needs of all children. In straightforward, no-nonsense language, this book summarizes what is known about how children learn mathematics, and how to build on what they know to realize more effective teaching practice. It will help teachers understand the learning trajectories of early mathematics and become quintessential professionals.

Children will delight in the 140 activities that bring math to life in the classroom. This collection is organized by curriculum area, making it easy for teachers to integrate the activities into their daily plans. Teachers/parents.

Teaching Mathematics in Early Childhood

Integrating Math Into the Early Childhood Classroom

Early Childhood Mathematics Skill Development in the Home Environment

Games, Ideas and Activities for Early Years Mathematics

Simple Activities That Make Learning Math Easy & Fun

Mathematics Through Play in the Early Years

Children who learn math fundamentals in preschool and kindergarten have the best chance of later achievement in school; but all too often, children don't get the effective early math instruction that makes all the difference. Now there's a core early childhood textbook that helps current and future educators teach the most critical math concepts to young students while meeting today's national standards for mathematics education. Developed by Sally Moomaw, a nationally respected expert with more than 20 years of classroom experience, this accessible textbook gives readers a solid theoretical understanding of math concepts and standards and the guidance they need to create and implement their own lessons. Highly readable and practical enough for years of use beyond the classroom, this text: helps teacher plan effective lessons; advances inclusion by giving teachers universal design strategies and adaptations to help them support all learners; targets the critical math skills children will build on for the rest of their lives; focuses on the youngest students (including children wih special needs) so teachers can implement developmentally appropriate math instruction; gives teachers invaluable guidance in weavig math lessons into everyday routines and conversations; and makes teacher preparation clear and easy. Whether used in preservice courses on teaching mathematics or in-service professional development, this comprehensive textbook will help educators give the youngest students a strong foundation of basic math concepts, and prepare them for lifelong academic success.

More than one hundred math activities for young children that incorporate early learning standards.

Structured around Bishop’s six fundamental mathematical activities, this book brings together examples of mathematics education from a range of countries to help readers broaden their view on maths and its interrelationship to other aspects of life. Considering different

educational traditions and diverse contexts, and illustrating theory through the use of real-life vignettes throughout, this book encourages readers to review, reflect on, and critique their own practice when conducting activities on explaining, counting, measuring, locating, designing, and playing. Aimed at early childhood educators and practitioners looking to improve the mathematics learning experience for all their students, this practical and accessible guide provides the knowledge and tools to help every child.

Clearly babies come into the world remarkably receptive to its wonders. Their alertness to sights, sounds, and even abstract concepts makes them inquisitive explorers--and learners--every waking minute. Well before formal schooling begins, children's early experiences lay the foundations for their later social behavior, emotional regulation, and literacy. Yet, for a variety of reasons, far too little attention is given to the quality of these crucial years. Outmoded theories, outdated facts, and undersized budgets all play a part in the uneven quality of early childhood programs throughout our country. What will it take to provide better early education and care for our children between the ages of two and five? Eager to Learn explores this crucial question, synthesizing the newest research findings on how young children learn and the impact of early learning. Key discoveries in how young children learn are reviewed in language accessible to parents as well as educators: findings about the interplay of biology and environment, variations in learning among individuals and children from different social and economic groups, and the importance of health, safety, nutrition and interpersonal warmth to early learning. Perhaps most significant, the book documents how very early in life learning really begins. Valuable conclusions and recommendations are presented in the areas of the teacher-child relationship, the organization and content of curriculum, meeting the needs of those children most at risk of school failure, teacher preparation, assessment of teaching and learning, and more. The book discusses: Evidence for competing theories, models, and approaches in the field and a hard look at some day-to-day practices and activities generally used in preschool. The role of the teacher, the importance of peer interactions, and other relationships in the child's life. Learning needs of minority children, children with disabilities, and other special groups. Approaches to assessing young children's learning for the purposes of policy decisions, diagnosis of educational difficulties, and instructional planning. Preparation and continuing development of teachers. Eager to Learn presents a comprehensive, coherent picture of early childhood learning, along with a clear path toward improving this important stage of life for all children.

Mathematics Learning in Early Childhood

Forging Connections in Early Mathematics Teaching and Learning

Mathematics in the Early Years

Where Learning Begins : Mathematics : Mathematical Activities for Parents and Their 2- to 5-year-old Children

Ensuring Mathematical Success for All

Paths Toward Excellence and Equity

Tap into the Power of Child-Led Math Teaching and Learning Everything a child does has mathematical value--these words are at the heart of this completely revised and updated third edition of The Young Child and Mathematics. Grounded in current research, this classic book focuses on how teachers working with children ages 3 to 6 can find and build on the math inherent in children's ideas in ways that are playful and intentional. This resource - Illustrates through detailed vignettes how math concepts can be explored in planned learning experiences as well as informal spaces - Highlights in-the-moment instructional decision-making and child-teacher interactions that meaningfully and dynamically support children in making math connections - Provides an overview of what children know about counting and operations, spatial relations, measurement and data, and patterns and algebra - Offers examples of informal documentation and assessment approaches that are embedded within classroom practice Deepen your understanding of how math is an integral part of your

classroom all day, every day. Includes online video!

Early Childhood Mathematics, Fifth Edition is the most widely used guide for educators on teaching mathematics to young children in Kindergarten through Third Grade. Practical and applied, this trusted and research-based book encourages teachers and teacher candidates to create an active learning environment that fosters curiosity, confidence, and persistence in children learning mathematics. Expert author, Susan Sperry Smith relies heavily on the most current research in the field, aligns core content to the NCTM Standards, presents information on Cognitive Guided Instruction (CGI) and necessary adaptations for students with special needs. The book covers the most important key concepts for teaching math in the early years with three over-arching themes: knowledge of important mathematical relationships, number sense, and the ability to solve problems. The fifth edition builds on the reliability and excellency of previous editions with new information on meeting the educational needs of all students, the importance of STEM careers beginning in early childhood education, more activities, thematic unit, and curricular tools, multicultural literature and activities, a comprehensive update on The Common Core State Standards, NAEP, and the new DAP Position Statement.

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Note: This is the bound book only and does not include access to the Enhanced Pearson eText. To order the Enhanced Pearson eText packaged with a bound book, use ISBN 0133548635. In this unique 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 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. Improve mastery and retention with the Enhanced Pearson eText The Enhanced Pearson eText provides a rich, interactive learning environment designed to improve student mastery of content. The Enhanced Pearson eText is: Engaging. The new interactive, multimedia learning features were developed by the authors and other subject-matter experts to deepen and enrich the learning experience. Convenient. Enjoy instant online access from your computer or download the Pearson eText App to read on or offline on your iPad® and Android® tablet.* Affordable. Experience the advantages of the Enhanced Pearson eText for 40-65% less than a print bound book. * The Enhanced eText features are only available in the Pearson eText format. They are not available in third-party eTexts or downloads. *The Pearson eText App is available on Google Play and in the App Store. It requires Android OS 3.1-4, a 7" or 10" tablet, or iPad iOS 5.0 or later.*

The Development of Early Childhood Mathematics Education, Volume 53 in the Advances in Child Development and Behavior series, includes chapters that highlight some of the most recent research in the field of developmental psychology. Users will find updated chapters on a variety of topics, including sections on The DREME Network: Research and Interventions in Early Childhood Mathematics, The Use of Concrete Experiences in Early Childhood Mathematics Instruction, Interventions in Early Mathematics: Avoiding Pollution and Dilution, Coaching in Early Mathematics, and Designing Studies to Test Causal Questions About Early Math: The Development of Making Pre-K Count. Each chapter provides in-depth discussions, with this volume serving as an invaluable resource for developmental or educational psychology researchers, scholars and students. Contains chapters that highlight some of the most recent research in the area of child development and behavior Presents a wide array of topics that are discussed in detail

Let's Talk about Math

Early Childhood Math Centers--Counting

Early Childhood Math Centers--Sequencing

Engaging Young Children in Mathematics

What Teachers of Young Children Need to Know
More Than Counting

This third edition of the best-selling Mathematics in Nursery Education provides an accessible introduction to the teaching of mathematics in the early years. Covering all areas of mathematics learning - number and counting, calculation, pattern, shape, measures and data handling - it summarises the research findings and underlying key concepts and explains how adults can help children to learn through practical experiences, discussion and more direct intervention. This new edition has been fully updated to incorporate the latest research and thinking in this area and includes: why mathematics is important as a way of making sense of the world how attitudes to mathematics can influence teaching and learning how children learn mathematics new material on sorting, matching and handling data ideas for observation and questioning to assess children's understanding examples of planned activities suggestions for language development assessment criteria. This textbook is ideal for those training to be teachers through an undergraduate or PGCE route, those training for Early Years Professional Status and those studying early childhood on foundation or honours degrees as well as parents looking to explore how their young children learn mathematics. This will be an essential text for any Early Years practitioner looking to make mathematics interesting, exciting and engaging in their classroom.

This edited volume presents cutting-edge research on the professional competence of early childhood mathematics teachers. It considers professional knowledge, motivational-affective dispositions, skills and performance in early childhood mathematics and outlines future fields of research in this area. The book argues that it is essential for early childhood teachers to prepare a high-quality learning environment and that mathematical competence is highly relevant for children's individual development. Bringing together research from mathematics education, educational science and psychology, it integrates international perspectives and considers the contextual factors that affect the development of children's mathematical competence within Early Childhood Education and Care (ECEC) settings. The book uses a model to describe professional teacher competence that considers the dispositions of early childhood teachers, situation-specific skills of early childhood teachers and the performance of early childhood teachers. The book is the first of its kind to give a comprehensive overview and allows for integrative perspectives and interdisciplinary understanding regarding pre- and in-service ECEC teachers' professional competence in the domain of mathematics. It will be essential reading for academics, researchers and students of early childhood education, mathematics education and teacher education.

Help Students develop literacy and language skills through research-based, student-centered mathematics activities.

"The Big Ideas that convey the core concepts of mathematics are at the heart of this new book that gives early childhood educators the skills

they 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. It's the perfect guide for those who want to focus their instruction on mathematics that is central, coherent, and rigorous. In it, readers see clearly why building early foundations in math matters, why teachers' understanding of foundational math matters, and why the methods used to teach it matter. Developed by the Erikson Institute's Early Math Collaborative team, the book groups the Big Ideas into nine chapter on topics that are familiar to early childhood teachers-sets, pattern and regularity, number, counting, operations, measurement, data analysis, shapes, and spatial thinking. The work is in keeping with the content strands identified by the National Council of Teachers of Mathematics (NCTM), and maps pathways to help teachers meet the Common Core State Standards for Mathematics." -- publisher website.

Early Childhood Math Centers--Patterns

Activities for Small Hands and Lively Minds

A Mathematics Activity Curriculum for Early Childhood and Special Education

Big Ideas of Early Mathematics

Mathematics in Early Childhood

Activities for Integrating Science, Technology, Engineering, and Mathematics

"Activities and research-based strategies that build math skills, concepts, and vocabulary into classroom routines, learning centers, and more. Includes assessment & record-keeping forms."--Cover.

This edited book promotes thinking, dialogue, research and theorisation on multiple ways of making connections in mathematics teaching and learning in early childhood education. The book addresses some key challenges in research, policy and practice in early childhood mathematics education. It examines diverse ways for learning experiences to connect young children to mathematics, and the importance of forging connections between mathematics and young children's lives as key elements in their engagement with mathematics. Each chapter provides research or theoretical provocations and pedagogical implications for connecting children's lived experiences and ways of learning in mathematics teaching. The chapters are drawn from a range of international authors who raise important ideas within the overall context of current research and consider the theoretical and practical implications of their research. As such, the book advances current thinking on mathematics teaching and learning for children in the early years from birth to eight years with an emphasis on children aged birth to 5 years. It considers the purpose and value in connecting mathematics teaching and learning to children's lives, and provides

provocations for both educators and researchers on the many under-researched and under-represented aspects of early years mathematics teaching and learning.

This volume presents current research on the connections between the home and family environment on children's mathematics development. Focusing on infancy through first grade, it details the role of parents and other caregivers in promoting numeracy and the ways their active participation can prepare young children for learning about formal mathematics. Research data answer key questions regarding the development of numeracy alongside cognitive and linguistic skills, early acquisition of specific math skills, and numeracy of children with atypical language skills. The book also provides practical recommendations for parents and other caregivers as well as implications for future research studies and curriculum design. Included in the coverage: Ways to optimize home numeracy environments. Individual differences in numerical abilities. Cross-cultural comparisons and ways to scaffold young children's mathematical skills. Mathematics and language in the home environment. Center-based and family-based child care. Games and home numeracy practice. Early Childhood Mathematics Skill Development in the Home Environment is an essential resource for researchers, graduate students, and professionals in infancy and early childhood development, child and school psychology, early childhood education, social work, mathematics education, and educational psychology.

Early childhood mathematics is vitally important for young children's present and future educational success. Research demonstrates that virtually all young children have the capability to learn and become competent in mathematics. Furthermore, young children enjoy their early informal experiences with mathematics. Unfortunately, many children's potential in mathematics is not fully realized, especially those children who are economically disadvantaged. This is due, in part, to a lack of opportunities to learn mathematics in early childhood settings or through everyday experiences in the home and in their communities. Improvements in early childhood mathematics education can provide young children with the foundation for school success. Relying on a comprehensive review of the research, Mathematics Learning in Early Childhood lays out the critical areas that should be the focus of young children's early mathematics education, explores the extent to which they are currently being incorporated in early childhood settings, and identifies the changes needed to improve the quality of mathematics experiences for young children. This book serves as a call to action to improve the state of early

childhood mathematics. It will be especially useful for policy makers and practitioners-those who work directly with children and their families in shaping the policies that affect the education of young children.

Early Childhood Mathematics Activities

Games, Gameboards and Learning Centers for Early Childhood Education and Special Needs Children

Math Activities for Preschool and Kindergarten, Standards Edition

Eager to Learn

Exploring Mathematics Through Play in the Early Childhood Classroom

Mathematics in Early Years Education

Designed with busy teachers in mind, the Classroom Gems series draws together an extensive selection of practical, tried-and-tested, off-the-shelf ideas, games and activities, guaranteed to transform any lesson or classroom in an instant. Easily navigable, allowing you to choose the right activity quickly and easily, these invaluable resources are guaranteed to save you time and are a must-have tool to plan, prepare and deliver first-rate lessons. Games, Ideas and Activities for Early Years Maths provides a wealth of activities to supplement and support the teaching of maths in a fun and appealing way. Designed to enable practitioners to effectively support children's mathematical development across the EYFS, this is the resource that will bring maths to life in any early years setting. Alice Hansen provides easy-to-access and implement mathematical ideas that practitioners and teachers can use straight away, through topics that are commonly used in early years settings and classrooms. 150 unique ideas designed to enhance the teaching and learning of maths in the early years Activities that enable practitioners to integrate mathematical thinking into everyday activities 'How is this maths?' feature to support practitioners in identifying opportunities for emergent maths Step-by-step instructions for each activity Minimal preparation or resources required – easy to fit into a busy timetable

Engaging Young Children in Mathematics: Standards for Early Childhood Mathematics Education brings together the combined wisdom of a diverse group of experts involved with early childhood mathematics. The book originates from the landmark 2000 Conference on Standards for Pre-kindergarten and Kindergarten Mathematics Education, attended by representatives from almost every state developing standards for young children's mathematics; federal government officials; mathematicians; mathematics educators; researchers from mathematics education, early childhood education, and psychology; curriculum developers; teachers; policymakers; and professionals from organizations such as the National Conference of Teachers of Mathematics and the National Association for the Education of Young Children. The main goal of the Conference was to work collectively to help those responsible for framing and implementing early childhood mathematics standards. Although it has its roots in the Conference, the expanded scope of the standards and recommendations covered in this book includes the full range of kindergarten to grade 2. The volume is organized into two main parts and an online appendix (http://www.gse.buffalo.edu/org/conference/). Part One, Major Themes and Recommendations, offers a framework for thinking about pre-kindergarten - grade 2 mathematics education and specific recommendations. Part Two, Elaboration of Major Themes and Recommendations, provides substantive detail regarding young students'

*understandings of mathematical ideas. Each Part includes five parallel subsections: "Standards in Early Childhood Education"; "Math Standards and Guidelines"; "Curriculum, Learning, Teaching, and Assessment"; "Professional Development"; and "Toward the Future: Implementation and Policy." As a whole the book: * presents comprehensive summaries of research that provide specific guidelines for standards, curriculum, and teaching; * takes the recent reports and recommendations for early childhood mathematics education to the next level; * integrates practical details and research throughout; and * provides a succinct, but thorough review of research on the topics, sequences, and learning trajectories that children can and should learn at each of their first years of life, with specific developmental guidelines that suggest appropriate content for each topic for each year from 2-year-olds to 7-year-olds. This is an indispensable volume for mathematics educators, researchers, curriculum developers, teachers and policymakers, including those who create standards, scope and sequences, and curricula for young children and professional teacher development materials, and students in mathematics education, early childhood trainers, teacher educators, and faculty in mathematics education.*

"In this volume useful information for the teacher is presented concerning the importance of language and the communication of ideas, how to enhance classroom dynamics, and the use of alternate assessment and evaluation approaches in the early childhood grades."--Back cover.

The purpose of this book is to provide the teacher with a set of activity lessons with which to build a prenumber mathemtics program and to supplement the early childhood math curriculum through grade 3. These activity-oriented developmental lessons are grouped by mathematical principle. Preschool-grade 3.

The Development of Early Childhood Mathematics Education

Learning and Teaching Early Math

The LittleCounters® Approach to Building Early Math Skills

Exploring Math & Science in Preschool

Early Childhood Mathematics

The Learning Trajectories Approach

Weave STEM activities into young children's daily experiences for well-rounded learning.

Offers parents advice on helping their children grasp fundamental math skills in activities that develop concepts sequentially

The National Council of Teachers of Mathematics has established curriculum standards for early childhood math skills. Preschool Math features creative, developmentally appropriate activities that directly address these standards. These activities encourage interaction and communication, and feature healthy food themes, ready-to-use reproducibles and fundamental mathematical concepts. Give children a foundation for learning that will pave the way for future confidence and success in mathematics. It's as basic as 1-2-3!

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. Classroom examples illustrate that, unlike most formal tasks, play offers children opportunities to solve nonroutine problems and to demonstrate a variety of mathematical ways of thinking—such as perseverance and attention to precision. This book will help put play back into the early childhood classroom where it belongs. Book Features: Makes explicit connections to play and the Common Core State Standards in Mathematics. Offers many examples of free play activities in which mathematics can be highlighted, as well as

formal lessons that are inspired by play. Provides strategies for making assessments more playful, helping teachers meet increasing demands for assessment data while also reducing child stress. Includes highlight boxes with recommended resources, questions for reflection, key research findings, vocabulary, lesson plan templates, and more. "This is one of those books that I wish I had written. It is smart, readable, relevant, and authentically focused on children." —From the Foreword by Elizabeth Graue, Sorenson Professor of Early Childhood Education, University of Wisconsin "In this deceptively easy-to-read book, Amy Parks explains two things that could make a world of difference in early childhood and elementary classrooms: Mathematics isn't something in a workbook—it's a fascinating part of the real world; And playing in school isn't a luxury—it's an essential context for learning about all sorts of things, including mathematics. Through vignettes of children learning mathematics as they play, Parks helps teachers recognize their 'answerability to the moment,' eschewing someone else's determination of 'best practice' in favor of what works with actual children eager to learn mathematics." —Rebecca New, School of Education, University of North Carolina at Chapel Hill

Standards for Early Childhood Mathematics Education

Count on Math

Big Math Activities for Young Children for Preschool, Kindergarten, and Primary Children