

February 2008

Elem Math Learning Resources for School Board Approval

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These mathematics materials are intended to supplement and complement the previously adopted textbook series, *Investigations*:

AIMS

Grade Level: K-5

<http://www.aimsedu.org/>

By building conceptual understanding, providing effective intervention, or giving engaging enrichment, AIMS hands-on activities supplement your math and science programs to help every student succeed. Whether addition, fractions, or proportional reasoning, AIMS math lessons will engage K-9 students and teach them essential concepts.

Teaching Student Centered Mathematics

Author: John A VanDeWalle

Publisher: Allyn & Bacon

Year: 2005

Grade Level: K-5

<http://www.pearsonhighered.com:8081/educator/academic/product/0,3110,0205408443,00.html>

In addition to many of the popular topics and features from the author's market-leading textbook, Elementary and Middle School Mathematics, these volumes offer brand-new material. The expanded grade-specific coverage and unique page design allow readers to quickly and easily locate information to implement in the classroom. Nearly 200 grade appropriate activities are included in each volume (K-2, 3-5). The student-centered, problem-based approach will help students develop real understanding and confidence in mathematics, making this series indispensable for teachers!

The Problem Solver II

Publisher: Creative Publications/The Wright Group

Grade Level K-5

<http://www.wrightgroup.com/index.php/programsummary?isbn=0076033848&longCopy=Y>

Problem Solver II offers hundreds of new problems that can be integrated into any math curriculum, and uses the same ten strategies and four-step method of problem solving. Problem Solver II provides step-by-step lesson plans for teaching students to solve problems using a strategy or combination of strategies. Problem Solver II includes a bank of reproducible practice problems with interesting and relevant problem contexts, helping students to apply their problem-solving skills.

Puddle Questions for Assessing Mathematical Thinking

Publisher: The Wright Group

Grade Level K-5

<http://www.wrightgroup.com/index.php/programsummary?isbn=0076033864&longCopy=Y>

Rich, open-ended investigations at each grade level focusing on key math ideas including probability, measurement, reasoning, geometry, math language and visual thinking give students an opportunity to think, use tools and communicate ideas.

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Math Minutes

Publisher: Creative Teaching Press

Grade Level: 1-5

http://catalog.creativeteachingpresscatalog.com/firstgrade_math_minutes-p-37109.html

One Hundred Minutes to Better Basic Skills. Each book in this series features 100 "Minutes" to help students build basic skills, increase speed in math operations, and strengthen problem-solving skills. Each Minute consists of ten problems of varying degrees of difficulty that incorporate a variety of skills.

Balanced Assessment

Authors: Alan Schoenfeld, Principal Investigator, Balanced Assessment, University of California, Hugh Burkhardt, Director, Balanced Assessment, University of Nottingham, Judah Schwartz, Director, Balanced Assessment, Harvard University, Sandra K. Wilcox, Director, Balanced Assessment, Michigan State University

Publisher: Dale Seymour Publications

Grade Level: 3-5

http://plgcatalog.pearson.com/program_single.cfm?site_id=11&discipline_id=806&subarea_id=4602&program_id=670

Balanced Assessment helps teachers pinpoint areas where students need reinforcement by providing tasks that serve as instructional problems to enhance your existing curriculum. The program offers a balance of opportunities—long and short tasks, basic knowledge and problem solving, individual and group work, and the spectrum of concepts and processes that reflect the vision of the NCTM Standards—leading to student success in mathematics.

Nimble with Numbers

Publisher: Dale Seymour Publications

Authors Leigh Childs and Laura Choate

Grade Level: 1-5

http://plgcatalog.pearson.com/program_multiple.cfm?site_id=2&program_id=403&searchType=All&searchTerm=nimble%20with

Learning math is more fun with *Nimble with Numbers*! This program will enhance number sense and promote practice while students solidify their understanding of number concepts, problem solving, and critical thinking. *Nimble with Numbers* is packed with high-quality, engaging activities that are ideal for daily practice in school or at home, summer school, and after-school programs.

Get It Together!

Publisher: Equals

Grade Level: 4-8

<http://lawrencehalloffscience.stores.yahoo.net/getittogether.html>

Get It Together is a collection of over 100 mathematics problems for a groups of 3-6 people to solve together. Some of the mathematics topics covered are: Logic, Numbers and Operations, Geometry, Algebra, Probability, Measurement, and Functions. The book also offers advice for teachers on how to introduce, facilitate, and assess cooperative learning in their classrooms.

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Exemplars

Publisher: Exemplars.com

Grade Level: Pre-K - 12

<http://www.exemplars.com/materials/math/index.html>

Math Exemplars gives both teachers and administrators a way of assessing students' problem-solving and communication skills and provides classroom-tested, real-world problems for instruction. It can be integrated into existing curriculum to facilitate both assessment and instruction. The rubrics and benchmark papers provide teachers with a way to assess student performance and for students to self-assess their own work. Among the range of Exemplar materials, the following is included:

Best of Math Exemplars I CD-ROM, K-8

The original Best of Math Exemplars contains 100 assessment tasks and 80 instructional tasks selected from volumes 1-4. Tasks on this CD-ROM are correlated to [Everyday Math](#), state standards and national standards.

The CD features:

- A collection of 180 K-8 assessment and instruction tasks
- Tasks designated and grouped by grade levels K-2, 3-5 and 6-8
- Scoring rubrics and student benchmark papers
- Search capability by NCTM standards, grade level, time required, concepts and skills, interdisciplinary links and technology
- A browser-based platform using Acrobat Reader (provided on CD)
- The ability to be networked within your district or shared within a school
- A complimentary Getting Started Guide for teachers
- MAC and PC friendly

ordering code: **BOECD I**

Drops in the Bucket

Publisher: Frog Publications

Grade Level: K-5

<http://www.frog.com/drops/index.html>

Drops in the Bucket is a research-based supplementary material which provides systematic daily practice for skills and reinforcement to promote long-term memory. The systematic daily practice of Drops in the Bucket assures that the commonly taught and tested skills, vocabulary, and concepts will be maintained and strengthened, not introduced then forgotten.

Great Explorations

Publisher: GEMS

<http://www.lawrencehallofscience.org/gems/GEM141.html>

The more than one hundred highly involving cooperative logic activities in these exceedingly popular guides are designed for groups of four students. Each receives a clue to a problem and needs to share the information with all other group members to find the solution.

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Contexts For Learning Mathematics

Publisher: Heinemann

Authors: Catherine Twomey Fosnot, Antonia Cameron, Willem Uittenbogaard

<http://www.contextsforlearning.com/>

The new Contexts for Learning Mathematics series by Catherine Fosnot and colleagues uses carefully crafted math situations to foster a deep conceptual understanding of essential mathematical ideas, strategies, and models. Building on the ideals of a math workshop, each unit provides a two-week sequence of investigations, minilessons, games, and other contexts for learning.

Math in the Preschool

Publisher: Highscope Press

<http://secure.highscope.org/productcart/pc/viewPrd.asp?idproduct=531#details>

This book presents 50 early math activities that meet these needs for preschoolers. The activities build on children's natural interests and offer children the time and freedom to construct and reflect on math ideas. Teachers can use these step-by-step activities throughout the day, using mostly common, everyday materials.

M3: Mentoring Mathematical Minds

Publisher: Kendall-Hunt

Grade Level: 3-5

<http://www.kendallhunt.com/index.cfm?PID=219&PGI=246>

Combining the NCTM Content and Process Standards (2000), *Project M³*'s increased depth and complexity has created the type of mathematics that is both challenging and enjoyable for talented math students. Incorporates the NCTM Content Standards with an emphasis on mathematical inquiry, discourse, and problem solving.

Teaching Arithmetic

Publisher: Math Solutions

Grade Level: 2-5

<http://www.mathsolutions.com/index.cfm>

Lessons address the three important aspects of arithmetic instruction—computation, number sense, and problem solving. Also, each lesson provides all of the information teachers need for implementation, including step-by-step directions, amount of time needed, materials required, classroom vignettes, samples of student work, and a discussion of the math underlying the lesson.

Math by All Means

Publisher: Math Solutions

Grade Level: 2-5

<http://www.mathsolutions.com/index.cfm>

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The Math By All Means teaching units provide teachers with cohesive, classroom-tested lessons specially designed for five to six weeks of instruction.

Navigations

Publisher: NCTM

Grade Level: PreK-5

<http://my.nctm.org/eBusiness/ProductCatalog/productsview.aspx?id=110>,

Navigations Series translates Principles and Standards for School Mathematics into action. Each book includes practical, teacher-tested activities and a supplemental CD-ROM that features applets for students' use and resources for teachers' professional development.

Measuring Up!

Publisher: People's Education

Grade Level: 3-5

<http://www.peopleseducation.com/state/VA/measuringup/math.php>

Measuring Up Mathematics features 100% customization to the VA SOLs and excellent preparation for the Virginia SOL Assessment. Flexible enough to use in any setting, it employs a proven instructional model in each lesson: 1) focus on the VA SOLs, 2) guided instruction, 3) apply the VA SOLs, and 4) Virginia SOL Assessment practice that mimics the real test-taking experience.

Count on It!

Publisher: People's Education

Grade Level: 3-5

<http://www.peopleseducation.com/state/CA/focusedinstruction/countonit.php>

Count On It! provides targeted intervention for students who need help with math problem-solving. The consistent four-part lesson plan guides students systematically through each strategy in four explicit, carefully scaffolded steps: Understand the Problem, Make a Plan, Solve the Problem, and Check Your Answer.