

Resources and References

Recommendations by:

Office of School Improvement

❖ Successful Practices for Mathematics Achievement

<http://osi.fsu.edu/waveseries/ref/resref13.htm>

- Bibliography
- Mathematics Resources
- Web Sites

Bibliography

Florida Department of Education. *Florida Curriculum Framework; Mathematics PreK-12 Sunshine State Standards and Instructional Practice*. Tallahassee, FL: Author, 1996.

National Council of Teachers of Mathematics. *Curriculum and Evaluation Standards for School Mathematics*. Reston, VA: Author, 1989.

Resources

- **BEATCALC**
- **FCAT Sample Test Book, Answer Book and Answer Key Book**
- **Florida Curriculum Frameworks, Mathematics PreK-12 Sunshine State Standards and Instructional Practices**

- **Introduction to Algebra, Teacher's Guide: PASS**
- **Mathematics ECPT**
- **Mathematics Best Practices CD-ROM**
- **Opening the Gate**
- **Revised Mathematics Course Descriptions**
- **Specifications for the FCAT**
- **Sunshine Math (Superstars III)**
- **State of Florida Mathematics Sunshine State Standards**

BEATCALC - This a listserve service, each Monday morning you will receive a BEATCALC exercise that will instruct you how to do calculations mentally faster than someone using a calculator. To subscribe e-mail beatcalc@aol.com with this message in the body SUBSCRIBE BEATCALC <first name> <last name>.

FCAT Sample Test Book, Answer Book and Answer Key Book - contact your district assessment coordinator or obtain a copy at web site:

<http://www.firn.edu/doe/sas/fcatitem.htm>

Florida Curriculum Frameworks, Mathematics PreK-12 Sunshine State Standards and Instructional Practices - Single copies of the Florida

Curriculum Frameworks CD-ROM and of the Sunshine State Standards can be obtained by calling the Florida Department of Education Curriculum Services at (850) 488-1701. Printed copies and the CD-ROM were delivered to all public schools in Florida. Additional copies can be downloaded at website address:

<http://www.firn.edu/doe/curric/prek12/frame2.htm> or by calling 1-800-342-9271.

Introduction to Algebra, Teacher's Guide: PASS – for teachers who work

with students who are "at risk" or have mild learning disabilities. This document was sent to every Florida High School. Additional copies can be ordered through the DOE products catalog, page 63, number 9412, \$4.30 or call 1-800-342-9271.

Mathematics ECPT - a teacher curriculum/lesson plan database.

Available on-line at: <http://www.firn.edu/doe/curric/prek12/ecpt.htm>

Additional copies can be ordered at website address:

<http://www.firn.edu/doe/curric/prek12/frame2.htm> or by calling 1-800-342-9271. Professional Development for use of this tool is available from your Area Center for Educational Enhancement, for information contact Tom Baird at (850) 922-4207, SC 292-4207.

Mathematics Best Practices CD-ROM - 25 interactive mathematics activities, grades K-12, examples of problems and solutions which reference the Sunshine State Standards mathematics benchmarks. Designed for teachers, this CD-ROM was distributed to all schools in Florida.

Opening the Gate - K-12 classroom materials that emphasize algebraic thinking. These materials have been widely distributed and used in Florida districts. An update of this program is being done. To obtain copies of the original materials, contact Linda Fisher, Department of Education Mathematics Specialist, at (850) 488-1701, SC 278-1701 or Neal Meadows at the Panhandle Area Center for Educational Enhancement (PACEE), (850) 638-6131, SC 769-6131.

Revised Mathematics Course Descriptions - Revised 1997 Course Descriptions, including many mathematics courses, were mailed to districts in quantity last summer. They can be obtained from your district

school board office.

Specifications for the FCAT - These are available from your district assessment coordinator.

Sunshine Math (Superstars III) - new K-8 Superstars program. Print copies of this program were distributed to districts in 1996, with additional copies available at modest cost from PACEE. An updated version of this program will be distributed to districts soon for duplication and distribution to participating schools. Additional copies will be distributed by PACEE, where the contact person is Jean Chance, (850) 638-6131, SC 769-6131.

State of Florida Mathematics Sunshine State Standards – available in Chapter 3 of the Florida Curriculum Frameworks, Mathematics PreK-12 Sunshine State Standards and Instructional Practices listed above and accessible for copying at website address:

<http://www.firn.edu/doe/menu/sss.htm>. Single copies of the Florida Curriculum Frameworks CD-ROM and of the Sunshine State Standards can be obtained by calling the Florida Department of Education Curriculum Services at (850) 488-1701. Additional copies can be ordered at website address: <http://www.firn.edu/doe/curric/prek12/frame2.htm> or by calling 1-800-342-9271.

Mathematics Web Sites

1. **<http://forum.swarthmore.edu/mathmagic/index.html>** - Math Magic, a grades K-12 project that encourages teams of students to tackle challenges by e-mail to build problem-solving and communications skills.
2. **<http://archives.math.utk.edu/>** - Materials available on the Mathematics Archives are classified into five main categories: Topics in Mathematics, Software, Teaching Materials, Other Math Archives Features(Electronic Proceedings of Conferences), and Other Links.
3. **<http://archives.math.utk.edu/k12.html>** - archives of K-12 teaching materials.
4. **<http://math.rice.edu/~lanius/frac>** - see next description
5. **<http://math.rice.edu/~lanius/pres/map>** - Cynthia Lanius, a Houston Texas, mathematics teacher includes her own lessons on fractals and map making at these sites.
6. **<http://www.coolmath.com>** - includes activities for high school students (higher level topics).
7. **<http://mie.eng.wayne.edu/faculty/chelst/informs/>** - At this site, math modules, six in all, designed for basic algebra, as well as more advanced levels can be downloaded. Every module contains examples for classroom use, teacher instruction, sample overheads, practice problems, and suggestions for projects.

8. **<http://lonestar.texas.net/~escher/>** - an educational site that explores the work of M.C. Escher and includes contests for students.
9. **<http://nces.ed.gov/naep/>** - The NAEP science and math items have been released on the Internet. Under "Released Items," you can select the grade level for math or science and be able to: 1. print the questions and related information, including sample student responses; and 2. download the questions to make your own practice test.
10. **<http://pegasus.cc.ucf.edu/~ucfcasio/casio.htm>** - This site is dedicated to the enhancement of mathematics education and the use of technology to improve the learning and teaching of mathematics.
11. **<http://tqd.advanced.org/2647/index.html>** - Interactive Mathematics, High school topics including algebra, trigonometry, geometry, chaos and others.
12. **<http://www.ams.org/new-in-math/home.html>** - maintained on the American Mathematical Society's Web site, highlights the latest developments in mathematics, mathematics careers, Web links and more.
13. **<http://www.cut-the-knot.com/>** - interactive mathematics miscellany and puzzles offering games, quotes, and more on a variety of mathematical topics.
14. **<http://www.eduplace.com/math/index.html>** - the Houghton Mifflin Mathematics site has mathematical brain teasers, teachers' resource links, and a parents' handbook for helping children with mathematics.

15. **<http://www.enc.org/>** - the Eisenhower Regional Consortia serve 10 regions of the country and work with ENC to disseminate effective materials and teaching methods.
16. **<http://www.erols.com/bram/>** - Mathematics homework help and great links for high school mathematics classes.
17. **<http://www.learner.org/>** - helping schools and communities improve their math and science education programs is the mission of the Annenberg/CPB Math and Science Project.
18. **<http://www.nctm.org/>** - National Council of Teachers of Mathematics site including national standards and teacher resources.
19. **<http://www.planemath.com/>** - Plane Math, a place to learn cool things about math and aeronautics.
20. **<http://www.wwinfo.com/edu/flash.html>** - flashcards for kids, basic computation practice.
21. **<http://people.delphi.com/vlorbik/notices.html>** – catalogs American Mathematical Society articles on mathematics education published since 1995.
22. **<http://tqd.advanced.org/2647/main.htm>** - presents explanations and examples of mathematical topics and welcomes contributions.
23. **<http://www.ceemast.csupomona.edu/amte>** - the Association of Mathematics Teacher Educators, a nonprofit organization created to

promote the improvement of mathematics teacher education in all its aspects.

24. **<http://www-cm.math.uiuc.edu/MathLink>** – professional development opportunities and classroom resources to high school and lower-level college teachers of mathematics, statistics and related topics.
25. **<http://www.ed.gov/pubs/parents/Math/>** - "Helping Your Child Learn Math," from the U.S. Department of Education, gives parents ideas and activities to help children ages 5 to 13 learn mathematics.
26. **<http://www.ee.ryerson.ca:8080/~elf/abacus/>** - give information on the history of the abacus, along with an on-screen abacus and instructions for using it.
27. **<http://www.ncsa.uiuc.edu/Edu/RSEorange/buttons.html>**- offers multidisciplinary, grades 5-8 activities and resources for exploring the concept of pi.
28. **http://www.schoolnet.ca/math_sci/math/** - links to mathematics activities and resources.
29. **<http://www-sci.lib.uci.edu/SEP/math.html>** - an extensive list of mathematics-related links, listed by topic and updated weekly.
30. **<http://www.uidaho.edu/LS/Math/imc/>** - the University of Idaho Mathematics Department's Internet Math Challenge posts a weekly mathematics puzzle for K-12 students. One student each week, chosen at random from those submitting correct solutions, wins a specially designed T-shirt.

31. <http://wyvern-community.school.hants.gov.uk/mathsres> – offers lessons plans and worksheets, indexed by topic, geared toward the U.K. national curriculum.

Recommendations by:

Miami-Dade County Public Schools

Division of Mathematics and Science Education

Miami-Dade County Public Schools Site:

<http://www.dade.k12.fl.us/mathsci/>

List of Suggested Resources (but not limited to)

- ❖ **Discovering Geometry with The Geometer's Sketchpad – Key Curriculum Press**
- ❖ **EXPLORATIONS TI-92, 92 Geometric Explorations on the TI-92 by Michael Keyton – Texas Instruments**
- ❖ **Geoboard Activities by Ernest Woodward and Thomas Hamel –**
- ❖ **Geometry Experiments, Exploring Algebraic Connections by Mary Jean Winter and Ronald J. Carlson – Addison-Wesley**
- ❖ **Geometry Labs, Activities for Grades 8-11 by Henri Picciotto - Key Curriculum Press**
- ❖ **Geometry Problems, One Step Beyond (Grades 10-12) by Reuben Schadler – Dale Seymour Publications
J. Weston Walch Publishers**
- ❖ **Non-Euclidean Adventures on the LENART SPHERE by Istvan Lenart – Key Curriculum Press**
- ❖ **Rethinking Proof with the Geometer's Sketchpad by Michael D. de Villiers - Key Curriculum Press**
- ❖ **Slides, Flips and Turns by Louis R. Kroner - Dale Seymour Publications**
- ❖ **The Geometry of Wholemovement, Folding The Circle For Information by Bradford Hansen-Smith – Wholemovement Publications**