

# It Takes...



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*Comprehensive*  
MATHEMATICS  
P L A N

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## **Math Centers**

Math centers within the classroom provide extra assistance and activities for struggling students.

## **After School Study Time**

After school study time is required for struggling students. This dedicated "quiet time" is provided for the student to complete class assignments, complete homework assignments, work on long term projects, and prepare for tests. A classroom teacher moderates the after school study time assisting the student as needed. The after school study time teacher communicates with the student's classroom teacher to learn exactly what homework each student needs to complete, monitors the completion of that work, and notifies the classroom teacher of the student's efforts.

## **Coordinated Intervention among School Staff**

Utilize the school staff to plan intervention strategies for individual students. The counselor will check on struggling students on a weekly basis and communicate with the parent and teacher. Communication between teachers of struggling students, the counselor, and the student provides a safety net for the student.

## **Small Group Guided Instruction**

Identify groups of students (5 or less) who need additional assistance with a concept and work with them in a small group while the rest of the class is working on independent practice. Small group instruction addresses individual needs effectively and efficiently and increases student understanding and grasp of course content. This strategy also motivates students and generates greater student involvement in learning.

## **Interventions**

If a student scores at Level 1 or Level 2 on FCAT Mathematics, the student must receive remediation the following year. Remediation may be integrated into the student's required mathematics course, offered as a pull-out, or in the case of secondary, offered as Intensive Mathematics, an elective course, in addition to the regular mathematics courses (Student Progression Plan).

Interventions are designed to assist students in strengthening their ability in areas of identified need. The classroom teacher examines the student's data, determines the student's areas of strength and areas for improvement, and designs a plan to assist the student in improving mathematically. When appropriate, the classroom teacher and the supplemental support provided coordinate the activities with the student's primary mathematics class. Intervention classes utilize technology, peer tutors, classroom aides, and school



volunteers to assist struggling students. Cooperative groups, one-to-one tutoring, and guided instruction are used to help strengthen student's area of weakness. Mastery of the Sunshine State Standards benchmarks is continually monitored. Immediate feedback is provided and appropriate interventions applied for the individual student's success. The following tables (Table 4.9 and Table 4.10) identify various resources that may be used for interventions.

**TABLE 4.9: ELEMENTARY MATHEMATICS INTERVENTIONS**

<b>INTERVENTION RESOURCES</b>	
<b>TIER 1</b>	<p><b>Florida Online Intervention:</b></p> <p>Interactive, voiced instruction and practice providing alternative approaches for the concepts and skills taught in the each Student Edition lesson and a built-in management system for teachers.</p>
	<p><b>Florida Destination Math:</b></p> <p>Incorporated into the online Student eBooks and online Teacher Editions, provides engaging, interactive animations for standards instruction and practice for modeling with the class or assigning to students.</p>
	<p><b>HMH Mega Math:</b></p> <p>Provides additional practice of the Florida benchmarks with engaging activities correlated to the Student Edition. Includes audio and animation.</p>
<b>TIER 2</b>	<p><b>Florida Soar to Success Math (Grades 1 – 5):</b></p> <p>Online system of diagnostic, prescriptive assessments and targeted instruction providing individual diagnosis and intervention by automatically prescribing individual learning plans to help student achieve grade-level mastery. Includes built-in teacher management tools that allow teachers to monitor student progress and print reports. A special assessment in the Student Edition, Show What You Know, identifies students who would benefit from Intensive Intervention.</p>
	<p><b>Strategic Intervention Skills:</b></p> <p>Target at students who are performing up to 2 years below grade level. By focusing on essential prerequisites and concepts for each chapter, the tiered intervention skills prescribe instruction to prepare students to work successfully on grade-level content. This resource helps the teacher accommodate the diverse skill levels of the students. Student performance on the Show What You Know page will allow to diagnose weaknesses and prescribe appropriate intervention. The <i>Strategic Intervention</i> is tied to each skill after the first skill.</p>



**TABLE 4.9: ELEMENTARY MATHEMATICS INTERVENTIONS**

<b>INTERVENTION RESOURCES</b>	
<b>TIER 3</b>	<p><b>Florida Soar to Success Math (Grades 1 – 5):</b>                      Online system of diagnostic, prescriptive assessments and targeted instruction providing individual diagnosis and intervention by automatically prescribing individual learning plans to help student achieve grade-level mastery. Includes built-in teacher management tools that allow teachers to monitor student progress and print reports. A special assessment in the Student Edition, Show What You Know, identifies students who would benefit from Intensive Intervention.</p> <p><b>Intensive Intervention Skills:</b>                      Targeted at students who are performing 2 or more years below grade level. By focusing on essential prerequisites and concepts for each chapter, the tiered intervention skills prescribe instruction to prepare students to work successfully on grade-level content. This resource helps the teacher accommodate the diverse skill levels of the students. Student performance on the Show What You Know page will allow to diagnose weaknesses and prescribe appropriate intervention. The <i>Intensive Intervention</i> is tied directly to the first skill.</p>
<b>ENRICHMENT</b>	<p><b>GO Math! Florida Enrich Book with Enrich Teacher Edition (with answers):</b>                      Activities are designed to extend learning of high achievers. Enrich Teacher Edition contains answers.</p>
<b>MONITORING PROGRESS</b>	<p><b>The following assessments monitor student progress on mathematics:</b></p> <ul style="list-style-type: none"> <li>• District’s Baseline Assessment</li> <li>• District’s Interim Assessments, Fall and Winter (Grades 3-5)</li> <li>• <i>GO Math! Florida Assessments</i> <ul style="list-style-type: none"> <li>○ Prerequisite Skills Assessment</li> <li>○ Beginning-of-Year Test</li> <li>○ Middle-of-Year Test</li> <li>○ End-of-Year Test</li> <li>○ Benchmark Mini Assessments</li> <li>○ Chapter Tests (Form A and B)</li> <li>○ Big Idea Assessments</li> </ul> </li> </ul>
<b>REFERENCE BOOKS</b>	<p><i>Principles and Standards for School Mathematics</i>                      National Council of Teachers of Mathematics (NCTM)</p>
<b>TEACHER REFERENCE BOOKS</b>	<p><b>ASSOCIATION FOR SUPERVISION AND CURRICULUM DEVELOPMENT</b></p> <ul style="list-style-type: none"> <li>• Robert Marzano, Debra Pickering, and Jane Pollock, <i>Classroom Instruction That Works</i></li> </ul> <p><b>NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS</b></p> <ul style="list-style-type: none"> <li>• <i>Principles and Standards for School Mathematics</i></li> <li>• <i>A Research Companion to Principles and Standards for School Mathematics</i></li> </ul>



**TABLE 4.10: SECONDARY MATHEMATICS INTERVENTIONS**

SECONDARY MATHEMATICS INTERVENTION PROGRAMS		Instructor Lead (I) Technology Based (T)	Number Sense, Concepts, & Operations	Measurement	Geometry and Spatial Sense	Algebraic Thinking	Data Analysis & Probability
Grade 6-12	Explore Learning Gizmos ( <a href="http://www.explorelearning.com">www.explorelearning.com</a> )	I/T	√	√	√	√	√
	FCAT Explorer ( <a href="http://www.fcatexplorer.com">http://www.fcatexplorer.com</a> )	I/T	√	√	√	√	√
	Florida Focus ( <a href="http://focus.florida-ahcieves.com">http://focus.florida-ahcieves.com</a> )						
	Riverdeep (Destination Math or Tangible Math)	I/T	√	√	√	√	√
	Virtual Manipulative ( <a href="http://matti.usu.edu/nlvm/nav/vlibrary.html">http://matti.usu.edu/nlvm/nav/vlibrary.html</a> )	I/T	√	√	√	√	√
Grade 6 - 8	Afterschool Achievers: Math Club ( <a href="http://www.greatsource.com">http://www.greatsource.com</a> )	T	√	√	√	√	√
	Compass Learning Odyssey	I/T	√	√	√	√	√
	Compass Learning For Course Recovery	I/T	√	√	√	√	√
	TI 84+ Graphing Calculators	I/T	√	√	√	√	√
Algebra I	Cognitive Tutor - Algebra I, Bridges to Algebra	I/T	√	√	√	√	√
	Explore Learning ( <a href="http://www.explorelearning.com">www.explorelearning.com</a> )	T	√	√	√	√	√
	Navigator (TI Interactive Product)	T	√	√	√	√	√
	TI 84+ Graphing Calculators	I/T	√	√	√	√	√
	E2020	I/T	√	√	√	√	√
	Cognitive Tutor – Algebra I	I/T	√	√	√	√	√
Geometry	Cognitive Tutor – Geometry	I/T	√	√	√	√	
	Explore Learning ( <a href="http://www.explorelearning.com">www.explorelearning.com</a> )	I/T	√	√	√	√	√
	Geometer's Sketchpad	I/T	√	√	√	√	√