

Intervention Chart

Level: Secondary Grades (6 – 12)

Subject Area: Mathematics

	Recommendations for Response to Intervention (Rti)	Diagnostic Assessment	Suggested Materials for Tier 1 Interventions	Research-Based Programs and Instructional Activities Interventions for Tier 2 and Tier 3	References for Additional Research-Based Instructional Activities	Progress Monitoring
	<p>The U.S. Department of Education in its document “Assisting Students Struggling with Mathematics: Response to Intervention for Elementary and Middle Schools”, April 2009 makes the following recommendations:</p> <ol style="list-style-type: none"> 1. Screen all students to identify those at risk for potential mathematics difficulties and provide interventions to students identified at risk. 2. Instructional materials for students receiving interventions should focus intensely on in-depth treatment of whole numbers in kindergarten through grade 5 and on rational numbers in grades 4 through 8. These materials should be selected by committee. 3. Instruction during the intervention should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review. 4. Interventions should include instruction on solving word problems that is based on common underlying structures. 5. Intervention materials should include opportunities 	<p>District Diagnostic Tests</p>	<p>SUGGESTED MATERIALS: Interventionist may prescribe intervention using any of the following resources:</p> <p><u>Core Textbook for Appropriate Course</u></p> <p>6-12</p> <ul style="list-style-type: none"> • Student Textbook • Teacher Edition • FCAT Prep Workbook • Practice Workbook • Student Manipulatives • Teacher Resource Book • Notetaking Guide • Reteach Workbook • Enrichment Workbook • Family Involvement Activities • Assessment Guide • Destination Math • Problem Solving Practice • Success for English Language Learners • Performance Assessment Masters • Intervention Skills • Workbook & Masters • FCAT Problems of the Day • DOE Sample Test 	<p>PROGRAMS:</p> <p>All schools have:</p> <ul style="list-style-type: none"> • Core Textbook for Appropriate Course • Destination Math • Nettekter DI • Gizmos • FCAT Explorer • Florida Achieves • Geogebra • V-Math and V-Math Live (Middle Schools) <p>Some Schools have:</p> <ul style="list-style-type: none"> • FASTT Math Software (Tom Snyder Productions) • A+ • Geometer’s Sketchpad • Fathom • Best Quest Math’s Cool • Best Quest Algebra’s Cool • Tabula Digita <p>Other Research Based Programs:</p> <ul style="list-style-type: none"> • Number Worlds (SRA/McGraw-Hill) with Building Blocks Software • enVision Math (Scott Foresman-Addison Wesley) • Math in Focus, The Singapore Approach (Great Source) 	<p>PROFESSIONAL RESOURCES</p> <p>“Assisting Students Struggling with Mathematics: Response to Intervention (Rti) for Elementary and Middle Schools” Rti for students struggling in math</p> <p>Dropout Prevention</p> <p>Helping Students Navigate the Path to College: What High Schools Can Do</p> <p>Direct Instruction in Middle School Mathematics for Students with Learning Disabilities</p> <p>Mathematics Intervention at the Secondary Prevention Level of a Multi-Tier Prevention System: Six Key Principles</p> <p>Response to Intervention. The Future for Secondary Schools</p> <p>Florida Response to Intervention</p> <p>Florida Differentiated Accountability</p> <p>RTI & Math: The Classroom Connection – Estimates Considered, Logic Required, Data Imperative Hemp, Eaton, and Poole</p> <p>Success with Secondary RTI – A Toolkit for Middle and High Schools Wright, J</p>	<p>District developed Comprehension Checks</p> <p>Teacher made tests</p> <p>Benchmark Assessments</p> <p>Student work Samples</p>

Intervention Chart

Level: Secondary Grades (6 – 12)

Subject Area: Mathematics

	Recommendations for Response to Intervention (RtI)	Diagnostic Assessment	Suggested Materials for Tier 1 Interventions	Research-Based Programs and Instructional Activities Interventions for Tier 2 and Tier 3	References for Additional Research-Based Instructional Activities	Progress Monitoring
	<p>for students to work with visual representations of mathematical ideas and interventionists should be proficient in the use of visual representations of mathematical ideas.</p> <p>6. Interventions at all grade levels should devote about 10 minutes in each session to building fluent retrieval of basic arithmetic facts.</p> <p>7. Monitor the progress of students receiving supplemental instruction and other students who are at risk.</p> <p>8. Include motivational strategies in tier 2 and tier 3 interventions.</p> <p>RtI for students struggling in math</p> <p>Dropout Prevention</p> <p>Helping Students Navigate the Path to College: What High Schools Can Do</p>		<ul style="list-style-type: none"> National Library of Virtual Manipulatives Study Guide Workbook 	<ul style="list-style-type: none"> EveryDay Math Software other research based programs <p>INSTRUCTIONAL ACTIVITIES:</p> <ul style="list-style-type: none"> Additional time for mathematics instruction, greater frequency Small group explicit instruction with the teacher which whenever possible uses a concrete-representational-abstract teaching sequence Interventionist's prescribed assignments in Destination Math, FASTT Math, V-Math or other Software 	<p><u>Interventions for Struggling Learners – Putting RTI Into Practice</u> Goodman, G</p> <p><u>Adding It Up – Helping Children Learn Mathematics</u> National Academy Press</p> <p><u>Elementary and Middle School Mathematics Teaching Developmentally</u> John A. Van de Walle</p> <p><u>Principles and Standards for School Mathematics</u> <u>A Research Companion to Principles and Standards for School Mathematics</u> National Council Teachers of Mathematics, 2006</p> <p><u>Classroom Instruction that Works</u> Marzano, Pickering, and Pollock</p> <p><u>About Teaching</u> Marilyn Burns</p>	

Rtl Intervention Chart

Level: Secondary 6 - 12

Subject Area: Reading

	District Required Assessment	Diagnostic Assessment	Suggested Materials	Research-Based Programs and Instructional Activities (Interventions Tier 2 and Tier 3)	References for Additional Research-Based Instructional Activities	Progress Monitoring
--	------------------------------	-----------------------	---------------------	---	---	---------------------

<p>Vocabulary (Phonemic Awareness/Phonics)</p>	<p>FCAT SSS Reading</p> <p><i>Level 1 and lowest 30% Level 2</i></p>	<p>Diagnostic Assessments of Reading (DAR)</p> <p>Phonological Awareness Assessments</p> <ul style="list-style-type: none"> • Word Structure • Sound/Spelling • Affixes • Syllables • Latin/Greek Word Roots • Vowel Patterns • High-Frequency Words • Multisyllabic Words • Antonyms, Synonyms, Homonyms • Context Clues 	<p>SUGGESTED MATERIALS:</p> <p>Poems, children’s jingles, word sorts picture/photo cards, children’s books for read aloud, audio tapes (songs and poems), close procedures, word walls,</p>	<p>PROGRAMS:</p> <p>Reader’s Handbook Edmark Destination Read 180 Read On Edge Learning Village Willson</p> <p>INSTRUCTIONAL ACTIVITIES:</p> <p>Word Structure</p> <ul style="list-style-type: none"> • Teach students the patterns and structures of words • Discuss the sound and spelling rules of words • Link phonics with spelling • Teach the general rules of phonics for specific spelling patterns <p>Affixes/Latin and Greek Word Roots</p> <ul style="list-style-type: none"> • Teach students to examine words using their meaningful parts – base word, prefixes, or suffixes • Teach students to manipulate the word in a sentence • Use word webs with Latin and Greek roots <p>Syllables</p> <ul style="list-style-type: none"> • Teach open/closed syllables and patterns • Use syllable and vowel patterns to help determine accent or stress • Use VCCV and doublets word sort <ul style="list-style-type: none"> • Multisyllabic <p>Vocabulary</p> <ul style="list-style-type: none"> • Teach the derivational relation of words and spelling • Expose students to high-frequency words • Use word walls for new words • Teach categorizing and classifying of words • Use concept definition maps to provide definitional information about other words 	<ul style="list-style-type: none"> • <i>Core Teaching Reading Sourcebook K-8</i> (Honig, Diamond, Gutlohn) • <i>Guiding Readers and Writers Grade 3-6</i> (Fountas, Pinnell) • <i>Teaching Phonics and Word Study in the Intermediate Grades</i> (Blevins) • <i>Words Their Way</i> (Bear, Invernizzi, Templeton, and Johnston) • <i>Inside Words</i> (Allen) • <i>Word Play: Building Vocabulary</i> (Whitaker) • <i>Choice Words; How our Language Affects Children’s Learning</i> (Johnston) 	<p><i>Diagnostic Assessments of Reading (DAR)</i></p> <p>Phonological Awareness Assessments</p> <ul style="list-style-type: none"> • Rhyming Words • Segmenting Words • Initial Consonant Sounds • Final Consonant Sounds
---	---	--	--	--	--	---

Rtl Intervention Chart

Level: Secondary 6 - 12

Subject Area: Reading

	District Required Assessment	Diagnostic Assessment	Suggested Materials	Research-Based Programs and Instructional Activities (Interventions Tier 2 and Tier 3)	References for Additional Research-Based Instructional Activities	Progress Monitoring
Fluency	<p>FCAT SSS Reading</p> <p><i>Level 1 and lowest 30% Level 2</i></p>	<p>Diagnostic Assessments of Reading (DAR)</p> <p>Fluency Assessments</p> <ul style="list-style-type: none"> • Oral Reading <p>Fluency Probes</p>	<p>SUGGESTED MATERIALS:</p> <p>Choral reading of poems/sonnets, Reader’s Theatre scripts, classroom libraries with a variety of levels and genres, short-one page stories, ebooks, books on tape/cds, singing songs/rap</p>	<p>PROGRAMS:</p> <p>Sopris West – Six Minute Solution Read 180 Jamestown Timed Readings Edge Edmark Destination Read On Learning Village</p> <p>INSTRUCTIONAL ACTIVITIES:</p> <ul style="list-style-type: none"> • Model proficient reading through Read-aloud • Use Reader’s Theatre • Match books to the students’ independent reading level • Listening to books on tape/cds • Practice for performance reading <ul style="list-style-type: none"> • Songs or monologs • Poems/sonnets • Use “Read and Retell” to work in pairs for reading short stories • Practice rereads for taping themselves at the end of the week <ul style="list-style-type: none"> • Phrase and short sentences • Cooperated repeated reading 	<ul style="list-style-type: none"> • <i>Core Teaching Reading Sourcebook K-8</i> (Honig, Diamond, Gutlohn) • <i>The Fluent Reader</i> (Rasinski) • <i>Literacy for the 21st Century A Blanced Approach</i> (Tompkins) 	<p>Diagnostic Assessments of Reading (DAR)</p> <p>Fluency Assessments</p> <ul style="list-style-type: none"> • Oral Reading <p>Fluency Probes</p>

Rtl Intervention Chart

Level: Secondary 6 - 12

Subject Area: Reading

	District Required Assessment	Diagnostic Assessment	Suggested Materials	Research-Based Programs and Instructional Activities (Interventions Tier 2 and Tier 3)	References for Additional Research-Based Instructional Activities	Progress Monitoring
Comprehension	<p>FCAT SSS Reading <i>Level 1 and lowest 30% Level 2</i></p>	<p>Diagnostic Assessments of Reading (DAR)</p> <p>Comprehension Assessments</p> <p>- silent reading comprehension</p> <p>Scholastic Reading Inventory (SRI)</p>	<p>SUGGESTED MATERIALS</p> <p>Non-fiction, fiction, picture books, poetry, mysteries, biographies, science, social studies, post-its, graphic organizers, chart tablets, literature circles</p>	<p>PROGRAMS:</p> <p>Read XL Edmark Destination Read 180 Read On Reading Advantage Learning Village Edge Fusion Classroom Libraries</p> <p>INSTRUCTIONAL ACTIVITIES:</p> <ul style="list-style-type: none"> • Model Think-Aloud for metacognition • Practice eight comprehension strategies <ul style="list-style-type: none"> • Predicting • Connecting • Visualizing • Questioning • Identifying the big ideas • Summarizing • Monitoring • Evaluating • Teach the four steps in making inferences <ul style="list-style-type: none"> • Think of background knowledge about topics related to the story • Look for the author’s clues in the story • Ask questions tying together background knowledge and the author’s clues • Make inferences by answering the questions • Phrase and short sentences • Involve students in many activities reading/writing daily • Engage students in “Book Talks” • Provide guided and independent reading practice to ensure application of techniques good readers • Use Project CRISS to engage student into active learning 	<ul style="list-style-type: none"> • <i>Core Teaching Reading Sourcebook K-8</i> (Honig, Diamond, Gutlohn) • <i>Literacy for the 21st Century A Blanced Approach</i> (Tompkins) 	<p>Diagnostic Assessments of Reading (DAR)</p> <p>Comprehension Assessments</p> <p>- silent reading comprehension</p> <p>Scholastic Reading Inventory (SRI)</p> <p>SSS Diagnostic</p>

Intervention Chart

Level: Grades K-12

Subject Area: Science

	Recommendations for Response to Intervention (RtI)	Diagnostic Assessment	Suggested Materials for Tier 1 Interventions	Research-Based Programs and Instructional Activities Interventions for Tier 2 and Tier 3	References for Additional Research-Based Instructional Activities	Progress Monitoring
	<p>The National Science Education Standards recommend the use of multiple assessment methods including “<i>exercises that closely approximate the intended outcomes of science education.</i>” (National Research Council, 1996, p. 78).</p> <p>Recommendations of Science formative assessments require ongoing evaluation of student performance and include:</p> <ol style="list-style-type: none"> Multiple and varied opportunities for teachers to assess student learning immediately and to implement changes based on each student’s data. Frequent administration of brief probes or tests that reveal student thinking and provide immediate feedback on skills currently being taught. Evaluation of student products (written explanations, pictures, portfolio entries, models, graphic organizers) that include student reasoning. Listening to students’ 	<p>District Diagnostic Tests</p> <p>Assessments created by the Department of Curriculum</p> <p>Formative Assessments</p>	<p>SUGGESTED MATERIALS: Interventionist may prescribe intervention using any of the following resources:</p> <p><u>Core Textbook for Appropriate Course</u></p> <p>K-12</p> <ul style="list-style-type: none"> Scopes Daily lesson plans in the 5E model of instruction Daily Bellringers Benchmark Labs CRISS strategies and other content area reading instructional strategies FCAT Explorer Gizmos Brain-Pop Jr. Discovery Education Streaming and BrainPOP Picture-Perfect Science Hands-on activities and lab experiences Science Fair, SECME, and other science clubs/activities Teacher demonstrations, guided practice, and independent practice 	<p>PROGRAMS:</p> <p>All schools have:</p> <ul style="list-style-type: none"> Core Textbook for Appropriate Course Nettrekker Gizmos FCAT Explorer Tutorials FCAT Rx PowerPoint Presentations (high school) Science Eduware <p>Some Schools have:</p> <ul style="list-style-type: none"> Saturday Tutorials Peer Tutoring <p>INSTRUCTIONAL ACTIVITIES:</p> <ul style="list-style-type: none"> Differentiated instruction/tiered learning centers Small-group instruction Peer tutoring Saturday tutorials Before and/or after school tutorial or pull-out tutorial <i>FCAT Coach, Measuring Up</i>, or other benchmark review materials <i>Current Science, Science World</i>, or other age-appropriate science publications AIMS lab activities Community Outreach Programs/Speakers (South Florida Science Museum, Palm Beach Zoo, Gumbo Limbo Nature Center, 	<p>PROFESSIONAL RESOURCES</p> <p>FDOE Response to Intervention</p> <p>Science Response to Intervention</p> <p>Response to intervention: A case Illustration.</p> <p>Responsiveness-to-intervention: Lessons learned and to be learned.</p> <p>Dropout Prevention</p> <p>Helping Students Navigate the Path to College: What High Schools Can Do</p> <p>Response to Intervention. The Future for Secondary Schools</p> <p>Florida Response to Intervention</p> <p>Florida Differentiated Accountability</p> <p>Success with Secondary RTI – A Toolkit for Middle and High Schools Wright, J</p> <p>Interventions for Struggling Learners – Putting RTI Into Practice Goodman, G</p> <p>Classroom Instruction that Works Marzano, Pickering, and Pollock</p>	<p>District Developed Performance Tasks</p> <p>District Comprehension Checks</p> <p>Student Portfolios</p> <p>Student Work Folders</p> <p>Course Content Tests</p> <p>Science Diagnostic Tests; Fall/ Winter</p> <p>Formative Tests</p> <p>Science Notebooks</p> <p>Student Presentations</p> <p>Benchmark Labs</p> <p>Bellringers</p>

Intervention Chart

Level: Grades K-12

Subject Area: Science

	Recommendations for Response to Intervention (Rti)	Diagnostic Assessment	Suggested Materials for Tier 1 Interventions	Research-Based Programs and Instructional Activities Interventions for Tier 2 and Tier 3	References for Additional Research-Based Instructional Activities	Progress Monitoring
	<p>verbal explanations of observed or studied phenomena.</p> <p>5. Observations of students engaged in inquiry processes.</p> <p>Science summative assessments include: Florida Comprehensive Assessment Test (FCAT). This assessment program measures individual student achievement of the Florida Science Standards.</p> <p>The FCAT provides parents, teachers, and school districts information about a student's academic strengths and weaknesses.</p> <p>The National Assessment of Educational Progress (NAEP) is a nationally representative continuing assessment of what America's students know and can do in science.</p> <p>Dropout Prevention</p> <p>Helping Students Navigate the Path to College: What High Schools Can Do</p>		<ul style="list-style-type: none"> • Cooperative learning associated with teacher facilitated group activities • Various types of assessments including teacher-created tests, daily quick checks, Comprehension Checks, Focus Mini-Assessments, diagnostics, portfolios/student work folders, Science Notebooks, lab reports, and/or lab practicals • Student Science Textbook • Teacher Edition • Science FCAT Prep Workbook • Practice Workbook • Student Manipulatives • Teacher Resource Book • Science Notetaking Guide • Science Related Activities • Intervention Skills • FCAT Bellringers • DOE Sample Test • National Library of Virtual Manipulatives • Study Guide Workbook 	<p>Preservation Foundation, Arthur R. Marshall Foundation, etc.)</p> <ul style="list-style-type: none"> • Additional time for Science instruction, greater frequency • Small group explicit instruction with the teacher which whenever possible uses a concrete-representational-abstract teaching sequence 	<p>About Teaching Marilyn Burns</p>	

Rtl Intervention Chart

Level: Secondary 6 - 12

Subject Area: Writing

	District Required Assessment	Diagnostic Assessment	Suggested Materials	Research-Based Programs and Instructional Activities (Interventions Tier 2 and Tier 3)	References for Additional Research-Based Instructional Activities	Progress Monitoring
--	------------------------------	-----------------------	---------------------	---	---	---------------------

Writing	FCAT Writes	<p>Palm Beach Writes</p> <ul style="list-style-type: none"> Students should be assessed on four components of FCAT Writes scoring including focus, support, organization, and conventions. 	<p>SUGGESTED MATERIALS:</p> <ul style="list-style-type: none"> FCAT Anchor Sets Student friendly rubrics Non-fiction literature 	<p>PROGRAMS:</p> <ul style="list-style-type: none"> Writing plans available via Learning Village <p>INSTRUCTIONAL ACTIVITIES:</p> <p>Focus</p> <ul style="list-style-type: none"> Teach students to analyze essay prompts Discuss the different modes of the essay (e.g., persuasive and expository) Teach various methods of brainstorming and planning <p>Support</p> <ul style="list-style-type: none"> Teach students various forms of support Teach students to elaborate and extend examples rather than simply listing supporting ideas <p>Conventions</p> <ul style="list-style-type: none"> Teach grammar and spelling skills as part of the writing process <p>Organization</p> <ul style="list-style-type: none"> Expose students to various organizational patterns Teach students how to use a thesis to organize essays 	<ul style="list-style-type: none"> <i>Prentice Hall Literature Series</i> <i>Holt Grammar Series</i> 	<p>Palm Beach Writes</p> <ul style="list-style-type: none"> Provide students with scoring and feedback Have students read sample essays as both examples and nonexamples Provide students with a student friendly example of the FCAT Writes rubric Conduct writing conferences
----------------	--------------------	--	---	--	--	---