

## Do The Math

## Aligns to IDEA, Part B EDUCATION OF CHILDREN WITH DISABILITIES

The purpose of *IDEA*, *Part B*—*Formula Grant Programs* is to assist states in providing a free, appropriate public education (FAPE) in the least restrictive environment for children with disabilities ages 3 through 21. The following chart shows how **Do The Math** can support children with disabilities under IDEA, based on key components and recommendations from IDEA, Part B, Section 611. The criteria are drawn from the Federal *IDEA*, *Part B Final Rules and Regulations*, posted at:

http://www2.ed.gov/programs/osepgts/index.html

Components of a IDEA, Part B Program	Do The Math
Provide research-based and scientifically validated interventions	<b>Do The Math</b> , created by Marilyn Burns, gives students who have fallen behind a chance to catch up and keep up. Focusing on numbers and operations—the cornerstone of Elementary Math education— <i>Do The Math</i> helps students in grades 2-8 build a solid foundation in computation, number sense, and problem solving for immediate and long-term learning. The program, which reflects <i>National Council of Mathematics</i> (NCTM) standards, teaches essential Numbers and Operations math skills that integrate with a core math curriculum.
	Do The Math consists of 13 modules that target addition and subtraction, multiplication, division, and fractions. Each module includes a series of thirty, 30-minute step-by-step lessons, which offer multiple strategies to enable students to build a solid foundation of understanding. To achieve optimal learning, students gradually progress through the program in a four-phase pedagogy in which teachers model the mathematical representation on the board and guide the students toward working independently with monitored support from the teacher. In Do The Math, student interaction occurs in whole group, small group, and pairs as students work together to solve problems, play games, and explain their thinking.
	RESEARCH
	Do The Math is a research-based math intervention program designed to support students who are struggling with Elementary Arithmetic. The program was developed to address the growing National concern regarding mathematics performance in this country. The National Mathematics Advisory Panel's Final Report states that "to prepare students for Algebra, the curriculum must simultaneously develop conceptual understanding, computational fluency, and problem-solving skills." With a focus on Number and Operations—the cornerstone of elementary math education and a critical foundation of Algebra—Do The Math supports students in building a strong foundation in computation, number sense, and problem solving.
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Components of a IDEA, Part B Program	Do The Math
Provide research-based and scientifically validated interventions Continued	Do The Math is the result of the collaborative work of a research and development team headed by Marilyn Burns and contributed to by Math Solutions Professional Development Master Teachers. Marilyn Burns has worked with students and teachers and continues to teach regularly so as to deepen her understanding and insight into the needs of struggling students and the teachers who teach them.
	For more information about the <i>Do The Math</i> Research Foundation, please see: <a href="http://teacher.scholastic.com/products/dothemath/research.htm">http://teacher.scholastic.com/products/dothemath/research.htm</a>
Provide access to the Core Curriculum taught in General Education classrooms	Do The Math is organized into 13 modules. Each module includes 30 lessons designed for 30-minute classes, five days a week. Each module scaffolds and paces key concepts and skills for students who struggle with math.
	<ul> <li>Addition &amp; Subtraction</li> <li>Module A: Add two digit numbers to the sum of 100</li> <li>Module B: Subtract from numbers up to 100</li> <li>Module C: Develop computational strategies to add and subtract with numbers up to 1,000s</li> </ul>
	<ul> <li>Multiplication</li> <li>Module A: Understand the concept of multiplication</li> <li>Module B: Learn multiplication facts up to 12 x 12</li> <li>Module C: Develop the tools and strategies to multiply two-digit numbers</li> </ul>
	<ul> <li>Division</li> <li>Module A: Build understanding of the meaning of division</li> <li>Module B: Continue learning with divisors up to 10 and dividends up to 100</li> <li>Module C: Build the computation tools and strategies to solve problems with larger numbers, including two-digit divisors</li> </ul>
	<ul> <li>Module A: Build an understanding of fractions using a limited set of fractions. Identify equivalent fractions, compare and order fractions, and combine fractions with like denominators</li> <li>Module B: Develop strategies to compare and order fractions, including fractions greater than 1</li> <li>Module C: Add and subtract fractions, including improper fractions and mixed numbers, with like and unlike denominators. Represent fractions in lowest terms and estimate sums or differences.</li> </ul>
	Number Core  Develop mental representations of numbers using benchmarks of 5 and 10; compose and decompose quantities; build facility with figuring sums to 20; and apply the inverse property of addition and subtraction.

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Use Supplemental Instructional materials, where appropriate, to strengthen the efficacy of the comprehensive core curriculum	WorkSpace is an interactive student book that includes assignments to support students' transition to independent work. The written practice in the WorkSpace book is always similar to what students experience during the lesson and gives them the opportunity to record their thinking. The practice has been carefully sequenced to move from concrete experiences, to pictorial representations, to symbolic recording.
	Created as an intervention for struggling students, <i>Do The Math</i> is also organized around lessons that engage students with each concept and skill in several ways, deepening their mathematics knowledge. Manipulative materials provide students with concrete experiences with abstract ideas. Games offer engaging situations where mathematical understandings and skills are reinforced. Children's literature provides a springboard for instruction. Contexts make abstract mathematical ideas accessible.
Educate students in the least restrictive environment consistent with their educational needs	Instruction in <i>Do The Math</i> connects content with practice through direct instruction, meaningful practice, suggestions for differentiation, and strategically placed formative assessments. Lessons follow a Gradual Release model in order to prepare students for individual success. In Gradual Release pedagogy, the teacher maintains a level of responsibility during the first three phases to ensure that students have the mathematical understanding before releasing them to complete a task on their own.
	<ol> <li>Phase One—The teacher models and records the mathematical representation on the board.</li> </ol>
	<ol> <li>Phase Two—The teacher models again, eliciting responses from students, and again records on the board.</li> </ol>
	3. <u>Phase Three</u> —Students work in pairs to do the mathematics and the teacher records on the board.
	4. <u>Phase Four</u> —Students work independently, monitored and supported by the teacher.
	As with instruction, practice is carefully sequenced to move from concrete experience to pictorial representations to symbolic recording. Engaging games allow students to think strategically while reinforcing concepts and skills. The <i>WorkSpace</i> gives students an opportunity to record and explain their thinking numerically and in writing. The Interactive Whiteboard Tools turn every lesson into an engaging, visual experience.
Implement a multi-tiered strategy designed to provide increasingly intensive interventions to those students who are not making adequate progress in the Core Curriculum	Do The Math is organized into 13 scaffolded modules that focus on rebuilding fluency with whole numbers and fluency with fractions. Every module includes a series of thirty 30-minute step-by-step lessons. The modular design gives the program the flexibility to address all tiers of intervention in Grades 1-6.  Do The Math scaffolds these topics even further, moving from basic concepts to more complex operational work.  CONTINUED

Components of a IDEA, Part B Program	Do The Math	
Implement a multi-tiered strategy designed to provide increasingly intensive interventions to those students who are not making adequate progress in the Core Curriculum Continued	Students spend more time on key concepts over the course of multiple lessons, providing the time they need to learn, process, and build a deep understanding. The content in each module is intentionally sequenced and paced, placing emphasis on building depth of understanding of no more than 1-2 big ideas in math and 4-6 key supporting objectives.  Informal assessments are embedded into the lessons to provide a constant window into student performance and progress. Every fifth lesson is an opportunity to formally monitor student progress. Specific guidance for how to promote understanding and address student misconceptions is integrated into the lessons.	
Provide ongoing progress monitoring of students' responses to high-quality, research-based intervention, and use it to guide the Individualized Education Plan (IEP)	Do The Math includes both embedded progress monitoring, as well as formative and summative assessments that allow teachers to continuously evaluate student understanding and monitor their progress. Ongoing assessment is built into Do The Math as students use their WorkSpace during each lesson to follow along with lessons and to practice learned concepts and skills on a daily basis. During every fifth lesson, on a weekly basis, students complete the Show What You Know WorkSpace assignment to demonstrate understanding of the math content from the previous four lessons. After students complete the Show What You Know assignment, teachers can formally assess understanding of skills and concepts from the previous four lessons.	
	In addition, assessments are administered through the computer-based  ProgressSpace assessments at the beginning and end of each module and  semester to assess understanding and monitor student progress over time.  Beginning-of-Module Assessments—Administered at the start of each  Do The Math module to capture students' baseline scores and  understanding of foundational math skills	
	Formative Assessment — Daily observations give students the prompt attention that will enable them to complete math assignments successfully.	
	<ul> <li>Progress Monitoring, which occurs every fifth lesson, is followed by suggestions for differentiating instruction for students who need additional support and those ready for a challenge.</li> </ul>	
	End-of-Module Assessments—Administered at the end of each Do The Math module to enable teachers to track and monitor student progress over the course of 30 lessons	
	With <i>ProgressSpace</i> , all curriculum embedded assessments are web-based and customized to meet students' needs. Three easy-to-generate, actionable reports and a student test printout allow teachers to evaluate student understanding and growth. The Student Progress Report shows growth at the individual student level; the Grading Report shows performance at a class, grade, or school level; and the Response to Intervention report displays	

program performance at the school or district level.

Components of a IDEA, Part B Program	Do The Math
Include literacy instruction that targets English Language Learners who have not yet been identified as needing Special Education services	Do the Math is designed to grant maximum access and success for English Language Learners, with an emphasis on language development, the incorporation of visual representations and directions, and consistency across all instructional routines.
	The four-phase gradual release model prepares students for individual success and ensures that they are prepared to complete their work independently. Routines are well established so English Language Learners can focus on the content and not the process of the assignment.
	Numerous structured opportunities for students to engage in meaningful conversations about math are embedded throughout the program to support intentional vocabulary and language development, while increasing access to content. Working in pairs allows for English Language Learners to speak in their first language in order to understand the task at hand before practicing articulating their solution in English when they share with the larger group.
	<ul> <li>"Built-in-Differentiation" notes on each planner page summarize for teachers some of the important key practices used in each lesson that support English Language Learners.</li> </ul>
	Visual tools, such as visual representations of mathematical concepts, visual directions in the student WorkSpace, visual representations of manipulatives, and the visual connections to mathematics in children's literature all support students whose second language is English.
	Math vocabulary is explicitly taught using a consistent routine. Every lesson includes a sidebar that highlights the key math and academic vocabulary used in each lesson along with the Spanish translation. Language Development boxes provide further explanation and additional support.
Inform parents of General Education services that would be provided and strategies to support their child's rate of learning	Do The Math offers a Community Newsletter, available in English and Spanish that is sent home after every fifth lesson. The newsletter informs parents of the topics and concepts that have been presented in the classroom, and includes suggested activities and practice games for students to try at home. In addition, teachers can share WorkSpace pages and assessment results with parents.
Provide a high-quality professional development plan to support teachers providing Special Education services, as well as those implementing RtI	Do The Math Implementation Training
	This training helps Elementary teachers get started using the program in the classroom. Participants learn how to effectively use <i>Do The Math</i> , including navigating the program materials, experiencing the pace of a <i>Do The Math</i> module with tips for implementing instructional strategies, assessing student progress, and learning how to differentiate instruction.
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Components of a IDEA, Part B Program	Do The Math
Provide a high-quality professional development plan to support teachers providing Special Education services, as well as those implementing RtI Continued	In this interactive Webinar, Elementary teachers, coaches, and administrators learn how to get started with <i>Do The Math</i> , including previewing program materials, understanding the math behind <i>Do The Math</i> , teaching with lessons and games, placing students, and monitoring progress.  In-Classroom Support—RECOMMENDED, at an additional cost Scholastic consultants provide teachers with individualized support and focused strategies side-by-side in the classroom. They build relationships with teachers to support on-model implementation, classroom management, program monitoring, and data-driven instruction. A year-long customized plan of in-classroom visits provides teachers with in-person, individualized support and focused strategies for the classroom. For the best results, Scholastic recommends monthly visits for all teachers
Coordinate with activities funded by and carried out under the Elementary and Secondary Education Act (ESEA)	Do The Math can be integrated with funds from state, local, private, and other sources. The federal funding programs for which it qualifies include:  Title IA—Improving Basic Programs Title I—School Improvement Grants (SIG) Title I—Supplemental Education Services (SES) Title III—English Language Acquisition IDEA, Part B IDEA, Response to Intervention 21st Century Community Learning Centers (21CCLC) Race to the Top—District (RTT-D)