



Scholastic *Do The Math Now!*

Do The Math Now!, developed by Marilyn Burns, is an intensive intervention program for students in Grades 6-12 who have fallen behind. Designed to build numerical foundations necessary to prepare students for algebra, *Do The Math Now!* focuses on developing understanding and facility with whole numbers and fractions. By spending time developing unifying ideas, students build deep understanding, learn to reason mathematically, make connections across operations, and apply their skills to higher-level mathematics—critical foundations of algebra.

Instructional Content

Do The Math Now! is organized into two volumes—*Multiplication & Division* and *Fraction Fundamentals*. Both volumes are organized into five units, each with fifteen 30-minute lessons.

- *Multiplication & Division* develops visual representations and reasoning skills that strengthen students' conceptual understanding and computational skills. At the foundation of the lessons are applying the place-value structure of our number system and properties of numbers.
- *Fraction Fundamentals* strengthens students' conceptual understanding of fractions. By developing mental representations, students use number sense as they compare, order, and explore equivalent fractions. The goal is to help students develop the understanding and skills to reason, estimate, add, and subtract with fractions.

The Common Core State Standards recommend more focused and coherent content that will provide the time for students to discuss, reason with, reflect upon, and practice higher-level mathematics. For intervention students who have already fallen behind, instruction must focus on the most critical foundations for algebra—the Core Within the Core. *Do The Math Now!* rebuilds the cognitive structures for understanding and:

- Focuses on the Core Within the Core—developing understanding of key concepts and skills with whole numbers and fractions—the essentials necessary for students to succeed in algebra and higher-level mathematics
- Connects students' numerical learning to the Standards for Mathematical Content by providing lessons that balance developing understanding and learning procedures
- Supports the Standards for Mathematical Practice by strengthening students' ability to make sense of concepts, solve problems, reason, and use appropriate tools

Instructional Design

Instruction in *Do The Math Now!* 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.

1. Phase One—The teacher models and records the mathematical representation on the board.
2. Phase Two—The teacher models again, eliciting responses from students, and again records on the board.
3. Phase Three—Students work in pairs to do the mathematics and the teacher records on the board.
4. Phase Four—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 *WorkSpace* gives students an opportunity to record and explain their thinking numerically and in writing. The *Do The Math Now!* Interactive Whiteboard Tools turn every lesson into an engaging, visual experience.

Do The Math Now! Interactive Whiteboard Tools are completely integrated with the curriculum. When the teacher clicks on the Main Menu he or she gets a list of lessons rather than a list of tools. As the teacher teaches the lesson using the *Do The Math Now!* Teacher's Guide, he or she clicks on the appropriate tool, activity, or game, each of which is described in the print lesson. The tools are not an addition or supplement to the lesson, they are an integral part of the lesson. The tools were created so that the teacher could use the program effectively for whole class instruction or with larger groups of students. The easy-to-use tools are interactive versions of the student manipulative materials and provide enhanced student participation in large group settings.

Assessment & Progress Monitoring

Do The Math Now! includes both embedded progress monitoring and summative assessments that allow teachers to continuously evaluate student understanding and monitor their progress. Ongoing assessment is built into *Do The Math Now!* 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, summative assessments are administered through computer-based *ProgressSpace* assessments at the beginning and end of each unit and semester to assess understanding and monitor student progress over time.

- **Beginning-of-Unit Assessments** Administered at the start of each *Do The Math Now!* unit to capture students' baseline scores and understanding of foundational math skills.
- **End-of-Unit Assessments** Administered at the end of each *Do The Math Now!* unit to enable teachers to track and monitor student progress over the course of 15 lessons.
- **Beginning-of-Semester Assessments** Both the Multiplication & Division and Fraction Fundamentals volumes include an assessment to capture students' baseline scores at the beginning of each school semester. Both volumes include two Beginning-of-Semester Assessments each.
- **End-of-Semester Assessments** Administered at the end of each school's semesters, these assessments enable teachers to track and monitor student progress over the course of a semester. Both the Multiplication & Division and Fraction Fundamentals volumes include two End-of-Semester Assessments.

All assessments in *Do The Math Now!* are administered in *ProgressSpace*, the online assessment and reporting component. With *ProgressSpace*, 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 measure 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.

Scaffolded Instruction

Do The Math Now! builds whole number and fraction foundations, constructing a framework for learning that rebuilds students' cognitive structures for understanding mathematics. This aligns with the National Math Advisory Panel report that identified fluency with whole numbers and fractions as critical foundations for algebra. Instruction directly links these foundational topics to algebra by providing the teacher with *Connecting to Algebra* supports. *Connecting to Algebra* boxes are embedded in *Teacher Guide* lessons, explaining how particular content strategies, concepts, skills, and skills are foundational and critical for students' success in algebra.

Strategies for English Language Learners

Do The Math Now! allows for 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.

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. Vocabulary instruction is intentionally introduced after students experience the concept, helping students internalize the meaning of the word. Math vocabulary is explicitly taught using a consistent routine—students see, hear, say, and write the vocabulary word. Spanish translations are provided and cognates shown in italics. Language Development boxes point out the similarity of these words to their English equivalents or the multiple meanings of the English word in order to help Spanish-speaking students acquire vocabulary.

Lessons integrate multiple visual representations of key math concepts. Visual directions in the student *WorkSpace* model problems for students who have difficulty reading in English. Student glossaries offer visual descriptions of vocabulary words. Translated into Spanish, they allow Spanish-speaking students to refer to the vocabulary independently. Visual representations of mathematical concepts are embedded throughout the program and are consistently used throughout student work. Hands-on materials help students build understanding and practice skills.

Strategies for Special Education Students

The instructional practices in *Do The Math Now!* allow students with special needs to access and make sense of mathematics and experience success. Proven instructional strategies, along with an intentionally scaffolded curriculum, reveal to students how math works. The carefully paced and connected content in the program is particularly effective with special needs students who need time to understand how the math works in order to internalize it. The lessons support their needs by focusing on the connectedness of math and by providing ample time for students to cement their understanding. Through direct instruction that explicitly models how math students should learn, teacher think-alouds that model reasoning and logical thinking, and partner math, special needs students receive the support they need to experience success.

Through the use of hands-on manipulatives, interactive technology, visual models, and language instruction, students are exposed to content in a variety of formats, maximizing access to the material for all learners. Visual models, along with connections to logical reasoning, provide meaning that promotes long-term understanding and transfer of learning.

Motivation & Engagement

Organized into manageable chunks, the content in *Do The Math Now!* is sequenced and paced so that all students experience success early. Challenged to think about math in new ways, students begin to make sense of math and put forth the effort to succeed. Instructional materials are designed to engage students through modeling with concrete experiences, interactive whiteboard technology, strategic games, think-pair-share activities, and small-group work.

Home-School Connection

Located on the *TeacherSpace* CD-ROM, the *Do The Math Now!* Community News reproducibles provide communication to parents and are also available in Spanish. Through this ongoing communication, parents are kept informed on the concepts and activities that have been presented in the classroom. The newsletter also includes suggested activities and practice games for students to try at home. In addition, teachers can share *WorkSpace* pages and assessment results with parents.

Professional Development

Do The Math Now! Implementation Training helps teachers get started using the program in their classrooms. Participants learn how to effectively use *Do The Math Now!* to meet the needs of struggling math students in Grades 6-12, including:

- Understanding how the structure of the program builds foundational math skills and sequences content to teach students to reason mathematically
- Teaching the instructional strategies and lessons
- Using assessment data to influence instruction

 For additional information about *Do The Math Now!* visit www.scholastic.com/dothemath.