

**Math Blaster &  
IMPROVING BASIC PROGRAMS OPERATED BY LOCAL EDUCATIONAL AGENCIES  
(TITLE I, PART A)**

**FUNDING PURPOSE:**

***Title I, Part A – Improving Academic Achievement of the Disadvantage***

The bulk of federal NCLB funds are devoted to *Title I, Part A*. “The purpose of this title is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments.”

**TITLE I, PART A REQUIREMENTS AND MATH BLASTER KEY ELEMENTS:**

The *Math Blaster* product line consists of the following individual titles: (1) *Math Blaster Ages 5-7*, (2) *Math Blaster Ages 6-8*, (3) *Math Blaster Ages 7-9*, (4) *Math Blaster Ages 9-12*, (5) *Math Blaster – Master the Basics*, and (6) *Math Blaster Pre-Algebra*. Below are selected *Title I, Part A* requirements followed by the key elements of the *Math Blaster* product line that relate to these requirements. This alignment is focused on the school version with teacher support materials.

**HIGH-QUALITY EDUCATION ALIGNED TO STANDARDS**

***Title I, Part A Requirement:*** Ensuring that high-quality academic assessments, accountability systems, teacher preparation and training, curriculum, and instructional materials aligned with challenging State academic standards so students, teachers, parents, and administrators can measure progress against common expectation for student academic achievement. *Knowledge Adventure* is dedicated to creating multimedia products that will help ensure student’s educational success and life-long love of learning. The company encourages a student’s natural love of learning by combining the latest educational innovations with the latest computer technology. *Math Blaster* is an award-winning and student-tested supplemental education program for children in the classroom. The product line is aligned to national academic standards and has been recognized with national awards.

***Instructional Materials Aligned with Academic Standards...*** The *Math Blaster* product line is correlated to the *National Council of Teachers of Mathematics (NCTM) Standards*. Detailed product correlations are located at: <http://www.knowledgeadventure.com/school/teacher/correlations.aspx>.

***Content Areas...*** The *Math Blaster* product line provides motivating experiences for common expectations for student academic achievement in education. The content areas in each individual title are listed below:

- ***Math Blaster Ages 5-7*** (Grades K-2) – This action-packed program develops essential early math skills in counting, telling time, identifying money, using measurement, and performing basic operations. Problem-solving situations help students master skills and explore concepts. The curriculum skills focus on:
  - Counting by whole numbers;
  - Recognizing number patterns;
  - Understanding basic fractions;
  - Estimating and rounding-off numbers; and
  - Mastering measurement concepts.
- ***Math Blaster Ages 6-8*** (Grades 1-3) – Students sharpen math skills through number challenges that build operations and data skills. Students are introduced to addition and subtraction and learn to sort both simple and complex sets. Additional exploration activities build visual and logical thinking skills. The curriculum skills focus on:
  - Adding and Subtracting;
  - Identifying and completing number patterns up to 9999;
  - Recognizing simple and equivalent fractional parts;
  - Reading and interpreting charts and bar graphs;
  - Sorting simple and complex sets;
  - Manipulating shapes to complete tangram puzzles; and
  - Developing problem-solving procedures.
- ***Math Blaster Ages 7-9*** (Grades 2-4) – Students use problem-solving, estimating, and equation-building skills to develop confidence while conquering the next level of computational math. Realistic challenges engage students to apply basic operations, data interpretation, and geometry skills. The curriculum skills focus on:
  - Solving complex addition, subtraction, multiplication, and division problems;
  - Understanding fractions, decimals, and percentage equivalents; and
  - Discovering basic geometry properties.

- **Math Blaster Ages 9-12** (Grades 9-12) – Students develop advanced elementary math skills by completing equations, and using integers, fractions, decimals, and percentages. An adventure-story context keeps students' attention. The curriculum skills focus on:
  - Solving equations with two and three operands;
  - Using estimation to find answers within a range;
  - Adding fractions with common and uncommon denominators.
- **Math Blaster – Master the Basics** – Students are provided extensive practice through fast, futuristic game play focused on increasing computational fluency. Thousands of addition, subtraction, multiplication, and division problems help students master math skills and improve problem-solving abilities. A second CD containing more fun math activities can be copied and given to each student for further at-home practice. The curriculum skills focus on:
  - Mastering addition and subtraction;
  - Solving multiplication and division problems;
  - Improving math speed and accuracy (computational fluency);
  - Identifying fact families and equivalents; and
  - Developing complex problem-solving skills.
- **Math Blaster Pre-Algebra** – This program reinforces middle school math concepts. Activities focused on decimals, integers, and rational numbers help students prepare for algebra as they learn how to graph numbers and find solutions on a coordinate grid. In addition, students develop critical thinking skills solving word problems and writing equations. The curriculum skills focus on:
  - Understanding ratios, proportions, and percents;
  - Working with negative and positive integers;
  - Creating and translating mathematical expressions; and
  - Applying order of operations.

**Awards and Recognition...** Over the years, the *Math Blaster* series has received numerous awards. A few of these selected awards are:

- **Math Blaster Series**
  - *Eschool News* - Reader's Choice Award (3 times)
  - *Eschool News* – 2002 Practical Homeschooling Software Awards
  - *Practical Homeschooling* – Editor's Choice Award
  - *Computer Times* – The District's Choice Top 100 Products
  - *Curriculum Administrator* - #2 of 13 Dynamic Math Programs
  - *California Instructional Technology* – Picks of the Month
  - *Technology & Learning* – 1998 Software Reader Award
- **Math Blaster Master the Basics**
  - *The National Parenting Center* – Seal of Approval
  - *Dr. Toy* – 100 Best Children's Products 2006
  - *Dr. Toy* – Dr. Toy Smart Play/Smart Toy 2006
  - *iParenting Media* – iParenting Media Award

**MEETING NEEDS OF ALL CHILDREN**

**Title I, Part A Requirement: Meeting the educational needs of low-achieving children in our Nation's highest-poverty schools, limited English proficient children, migratory children, children with disabilities, Indian children, neglected or delinquent children, and young children in need of reading assistance.** The *Math Blaster* product line encourages success for all students. Instructions are given by an on-screen character in each game module. Additionally, each individual game module has a help button where students can have instructions read as often as necessary. The titles have various levels so activities can be geared to the student's abilities and needs.

**DISTRIBUTING AND TARGETING RESOURCES SUFFICIENTLY**

**Title I, Part A Requirement: Distributing and targeting resources sufficiently to make a difference to local educational agencies and schools where needs are greatest.** To provide purchasing flexibility for educators, *Knowledge Adventure* sells product in Teacher Editions (2 Users), Lab Pack (5 users), or Network Versions (unlimited users). *Knowledge Adventure* works with educators in order to target resources sufficiently to make a difference to local education agencies. Educators can call for a volume discount after five licenses. *Knowledge Adventure* sells all its award winning software through educational resellers; contact information is located online.

**IMPROVING AND STRENGTHENING ACCOUNTABILITY AND TEACHING**

**Title I, Part A Requirement: Improving and strengthening accountability, teaching and learning by using State assessment systems designed to ensure that students are meeting challenging State academic achievement and content standards and increasing achievement overall, but especially for the disadvantaged.** State assessment systems are designed to ensure that students meet challenging academic achievement and content standards. Frequently, states incorporate national standards when creating these state assessment systems. The *Math Blaster* product line is correlated to the *National Council of Teachers of Mathematics (NCTM) Standards*. Detailed product correlations are located at: <http://www.knowledgeadventure.com/school/teacher/correlations.aspx>.

### PROVIDING ACCELERATED EDUCATION

**Title I, Part A Requirement: Providing children an accelerated educational program, including the use of schoolwide programs or additional services that increase the amount and quality of instructional time.** To provide accelerated education for students, it is important for students to be able to progress in their individual learning. *Math Blaster* offers several methods of progress acceleration depending on the title.

- **Math Blaster Ages 5-7** (Grades K-2) – This title provides six activities with five levels of difficulty focused around an Intergalactic Zoo. Visual learning environments provide 150 lessons and 1000 problems. Students can click the paw on the tool bar to change levels within an activity. There is a Progress Tracker that records each student's progress. Students can view their completion of the activities.
- **Math Blaster Ages 6-8** (Grades 1-3) – Eight engaging activities and five levels of math content provide over 350 math lessons and 1000 math problems and puzzles which take place in an Intergalactic Fair. Students can click the hand on the tool bar to change levels within an activity. There is a Progress Tracker that records each student's progress. Students can view their completion of the activities. In addition, there is a rich collection of extension activities printable for classroom use.
- **Math Blaster Ages 7-9** (Grades 2-4) – Over 50 skill areas are presented in these engaging activities focused on battling bugs. There are over 350 math lessons and 1000 math problems and puzzles. Each computer activity has five levels of play. Upon mastering a level, the student automatically progresses to the next level. Alternatively, the student or teacher can use the Level button to adjust the level. The program records each student's progress in a Smart Chart. Students can view their completion of the activities. In addition, there is a rich collection of extension activities printable for classroom use.
- **Math Blaster Ages 9-12** (Grades 4-6) – This title provides over 50,000 problems in ten skill areas. There are ten activities with three levels of play. Activities allow students to select an easy, medium, or hard level. Students also can select the level of math curriculum focus. When a basic skill is master, students are reminded the date of mastery. An online help and math tips are available to students to offer explanations and "how-to's". In addition, there is a rich collection of extension activities printable for classroom use.
- **Math Blaster – Master the Basics** – Students save the solar system in this title that provides automatic progress tracking and take-home practice play.
- **Math Blaster Pre-Algebra** – In this title there are nine targeted activities taking place in a mystery theme. There are three levels of difficulty with over 4,000 word problems. Students can select one of three levels in the Explore Mode (easy, medium, and hard). Student also can change levels when within an activity. In addition, there is a rich collection of extension activities printable for classroom use.

### PROMOTING SCHOOLWIDE REFORM/USING SCIENTIFICALLY-BASED INSTRUCTION

**Title I, Part A Requirement: Promoting schoolwide reform and ensuring the access of children to effective, scientifically-based instructional strategies and challenging academic content.** All of the products from *Knowledge Adventure* begin with research and fact finding from the experts in the field. The *Math Blaster* series is based on the latest scientific research regarding how children learn and how technology can be used to enhance and support that experience. By using research, professional writers, and beta testing, *Knowledge Adventure* creates products that provide supplemental support for early literacy and help ensure that teachers and students receive positive and rewarding results. A white paper entitled, *The Blaster Method: Math Games to Make You Math Smart*, provides specific research details and is located at: <http://www.knowledgeadventure.com/school/teacher/>.

### PROFESSIONAL DEVELOPMENT

**Title I, Part A Requirement: Significantly elevating the quality of instruction by providing staff in participating schools with substantial opportunities for professional development.** *Knowledge Adventure* provides white papers, correlations to standards, testimonials and other information to advance educator's knowledge of learning. Each software level within the series is accompanied with a Teacher's Guide that contains classroom lessons and reproducible activity sheets that will complement the student's

experience with the software. Each of the hands-on-lessons focuses on one or more of the skills presented in the software. Lessons are not software-dependent. Teacher's Guides vary depending on the level of the title, more specifically:

- **Math Blaster Ages 5-7** (Grades) – The Teacher's Guide contains lessons that reinforce the math concepts covered in the game. Each lesson contains an outline explaining the learning objectives and the procedure for the activity. In addition, there are suggested extension activities that provide a more in-depth and challenging look at the concept.
- **Math Blaster Ages 6-8** (Grades) – Each unit of the student activities in this Teacher's Guide is designed to mesh with the skills taught in each software activity. Each lesson contains an outline explaining the learning objectives and the procedure for the activity. In addition, there are suggested extension activities that provide a more in-depth and challenging look at the concept.
- **Math Blaster Ages 7-9** (Grades) – Activities in this Teacher's Guide extend students' experience with the software program. The classroom-ready activities are designed to connect the program's module with the teacher's classroom mathematics curriculum. There is a mix of hands-on activities, games, and activity sheets.
- **Math Blaster Ages 9-12** (Grades) – This Teacher's Guide reinforce the skills practiced in the software. Students are encouraged to see the connections between the software, lesson, and mathematics used elsewhere in their classroom and their lives.
- **Math Blaster – Master the Basics** – The Teacher's Guide is divided into three sections: (1) Classroom Activities, (2) Worksheets, and (3) Online Resources. Classroom activities include teacher information and tips, student materials, and complete step-by-step directions. There are puzzles, games, and other hands-on activities designed to involve students and build interest in math. The Worksheets section contains an assortment of worksheets that can be reproduced for use in the classroom or at home. Each worksheet contains easy-to-follow directions and often a few sample answers, minimizing any need for adult direction. On-line Resources suggests educator's visit [www.knowledgeadventureschool.com](http://www.knowledgeadventureschool.com) for additional teacher information.

**PARENTAL INVOLVEMENT**

**Title I, Part A Requirement:** *Affording parents substantial and meaningful opportunities to participate in the education of their children.* Parents can purchase home versions of *Math Blaster* from the Knowledge Adventures website.