YOUR GUIDE TO THE ALPHABET OF MATHEMATICS®
Welcome to the World of TouchMath
The Alphabet of Mathematics since 1975

You are about to participate in an interactive Teacher Training that will guide you step-by-step through TouchMath computation. The program’s benefits will become clear as you progress through the unique multisensory strategies that have helped raise test scores since 1975.

TouchMath bridges the gap between concrete experiences and abstract concepts, reinforces number values, eliminates guessing, dramatically reduces student errors, and aids in memorization. But perhaps more important than all of those facts — is that by making math fun and accessible, TouchMath gives students confidence and inspires them to reach their academic potential.

Use this manual to follow along with the online training videos at www.touchmath.com/onlinetraining. There will be opportunities to work through problems as you learn the methodology, learn about our core programs built on the Common Core State Standards, and discover ways to differentiate your instruction with our classroom aids and technology components. In just about an hour, you will be ready to teach your students this intuitive learning system.

Thank you for your interest in TouchMath, and for all you do to ensure students of all ability levels and learning styles find success in mathematics.
Recommended Classroom Uses
How TouchMath meets your situation

¬ Prevention

**TouchMath is a natural prevention program when used with general education, RtI Tier 1 and 2 students because it...**

- Is intuitive and helps students quickly represent numbers and develop number sense.
- Allows students to succeed the first time they encounter skills by presenting concepts in multisensory ways that cater to all learning styles and abilities.
- Includes a wide variety of reinforcement pages that offer multiple opportunities for success.
- Incorporates all math concepts for any grade level, allowing it to be used as a standalone program or as a supplement to any other classroom series.

¬ Intervention

**TouchMath is effective with RtI Tier 3 and Title I because it...**

- Provides page layouts that are clean and uncluttered, making it easier for students to succeed.
- Displays problems in large, easy-to-read type, preventing students from feeling overwhelmed.
- Is carefully scaffolded, allowing students to master one concept before beginning another.
- Supports teachers in identifying, targeting, and remediating skills on an individual student basis while monitoring the progress and duration of the intervention.

¬ Intense Intervention

**TouchMath is highly effective with special education because it...**

- Keeps students on task by employing multisensory (seeing, saying, hearing, touching) approaches and appropriate page layouts.
- Presents a one-step-at-a-time approach that quickly provides success — improving self-image and developing better work habits.
- Provides real-world connections increasing student awareness of the need for math.
- Supplies objectives to meet IEP goals.
Learning Styles
Reach all learners

Children learn most effectively when all of their senses are involved. As they see, say, hear and touch using our signature TouchPoints on the numerals, they easily make the connection between the numeral and the quantity it represents.

TouchPoints

TouchPoints are unique to the TouchMath Program and provide these advantages:

1. Children enjoy a multisensory math experience while keeping their attention focused on their papers
2. Older students and students with learning differences can use TouchPoints as a portable, invisible tool for as long as needed
3. Students arrive at the correct answer without guessing
4. TouchPoints help develop comprehension and memorization

Visual Cues

The TouchMath Program uses visual cues such as arrows, boxes and dotted lines to guide students to the correct answer and promote good habits. Visual cues help to:

1. Develop left/right directionality
2. Reduce number reversals
3. Understand place value
4. Simplify and clarify all areas of computation

Step-by-Step Strategy

Our sequential strategy is structured so that students fully understand one skill before we introduce the next. They feel optimistic and confident as they assimilate new information. You save the time and frustration of teaching and re-teaching.

Age-Appropriate Materials

Our designers are acutely aware of the importance of building student self-esteem as we deliver information. For young children, this means plentiful workspace, a manageable number of problems on each page, large print, instructions that do not require reading skills, coloring pictures and games. Materials for older students of varying ability levels use fewer pictures and age-appropriate content.
"Engaging as many senses as possible is the way to get students to learn better; TouchMath takes care of that."

Debbie King, Instructional Intervention Specialist, South Carolina

The TouchMath multisensory approach to teaching basic math concepts engages students in ways that traditional teaching techniques can miss. It is based on counting, the simplest of math skills, and the foundation is laid with the Touching/Counting Patterns. By learning the Touching/Counting Patterns, you will be able to teach students faster and with greater accuracy, because students excel when they can see the numerals, touch the TouchPoints, say the numbers, and hear the problem.
TouchMath Touching/Counting Patterns

TouchPoint Placement

Each TouchMath numeral has a corresponding number of TouchPoints placed upon the numeral. This TouchPoint placement has been carefully researched. It is important to use the same pattern consistently.

- Each numeral from 1 through 9 has TouchPoints corresponding to the digit’s value.
- Numerals 1 through 5 have single TouchPoints that are touched and counted once.
- Numerals 6 through 9 have double TouchPoints that are touched and counted twice.

Teach your students to count aloud as they touch the single TouchPoints once and double TouchPoints twice. This multisensory approach engages students on auditory, visual, and tactile/kinesthetic levels. To ensure that students arrive at the right answer, it is important that they touch the TouchPoints in the correct Touching/Counting Pattern for each numeral. The Touching/Counting Patterns are shown on the next page.

HELPFUL HINT:

Displaying TouchMath posters in your classroom will help students master the Touching/Counting Patterns. Information on appropriate posters may be found in your current TouchMath catalog or at www.touchmath.com
The one is touched at the top while counting: “One.”

The two is touched at the beginning and the end of the numeral while counting: “One, two.”

The three is touched at the beginning, middle, and end of the numeral while counting: “One, two, three.”

The four is touched and counted from top to bottom on the down strokes while counting: “One, two, three, four.” For the closed shaped 4, use the same square counting pattern. To help students remember the first TouchPoint, it may be referred to as being in “outer space.”

The five is touched and counted in the sequential order pictured: “One, two, three, four, five.” To help in remembering the fourth TouchPoint, it may be referred to as the “belly button.”

The six begins the use of double TouchPoints which are touched and counted twice. The six is touched and counted from top to bottom: “One-two, three-four, five-six.”

The seven is touched and counted from top to bottom, counting the double TouchPoints first: “One-two, three-four, five-six,” followed by the single TouchPoint: “seven.” The single TouchPoint can be thought of as the nose. Teachers sometimes tell young or students needing intervention to “touch him on the nose” to help them remember the final TouchPoint.

The eight is touched and counted from left to right: “One-two, three-four, five-six, seven-eight.” Tell young or students needing intervention that the eight looks like a robot. Count his head first and then his body. You may also tell students the eight is touched in the same pattern as you write the letter Z.

The nine is touched and counted from top to bottom, counting the double TouchPoints first: “One-two, three-four, five-six, seven-eight,” followed by the single TouchPoint: “nine.” To the tune of “Head, Shoulders, Knees, and Toes,” have the students touch these body parts with both hands while singing “head, shoulders, knees, and toes, touch the nose” (with one finger). This will physically show the nine TouchPoint counting pattern.

The zero has no TouchPoints, so you never touch and count zero.
Further Study  
Transitioning from Concrete to Symbolic Learning

Eminent learning theorists Jerome Bruner and Jean Piaget concluded that there are three major learning stages in early childhood development: concrete, pictorial and symbolic. Children must be in a state of readiness to absorb material on each of these levels.

TouchMath is designed to help students transition from concrete to symbolic learning. Young students first learn to count using familiar objects like apples, pencils, balloons, etc. Then we place pictures of these objects on the numerals. The objects are later replaced by TouchPoints. Eventually, most students progress to a symbolic understanding and leave the TouchPoints behind.

For research information, visit www.touchmath.com/research.

TRUE STORIES

Above Grade Level: An Administrator’s Dream Comes True

“My kindergarteners are above grade level in math. They are almost at second grade level (average test score - first grade, ninth month). My first graders are at about a third grade level (average test score - third grade, fifth month). My second and third graders are currently doing fourth-grade math.

“I see TouchMath as a basic foundation. It’s like building a house; you start from the very bottom and build up. With TouchMath, there are a lot of hands-on activities with TouchPoints. The program is self-explanatory, and children are able to learn at their own pace without constant direction.

“TouchMath helps us build a bridge between concrete and abstract thinking. Children start out with TouchPoints, and eventually they understand abstract concepts. You can see them thinking about the problems. They don’t use their fingers anymore. They solve problems internally. It’s powerful to see how they take something concrete and make it abstract. It becomes a natural part of learning.”

To read the entire story, visit www.touchmath.com.