

RIGHTSTART™ MATHEMATICS: Letter to Parents

by Joan A. Cotter, Ph.D.

This year your child will be using the RightStart™ Mathematics program. Our goal is that children will understand mathematics, feel confident applying it to new situations, and enjoy the beauty of it.

Here are a few comments and thoughts about the RightStart Math program.

1. Understanding Versus Rote Memorization

Math must be 95% understood and only 5% memorized.

Mathematics must be understood so it can be applied to new situations. Rather than just memorizing a fact or process, students should understand the concept and be able to apply it. That is the mark of true mastery.

Application at home: Ask how they arrived at an answer, not just for the answer.

2. Our Number System

Names for the numbers 11 to 99 are confusing and don't follow a consistent pattern. This temporary renaming helps children understand how numbers are organized. In the younger grades, we temporarily give children another way to say the numbers to help them recognize patterns and understand place value. For example:

11 → 1-ten 1

12 → 1-ten 2

19 → 1-ten 9

20 → 2-ten

21 → 2-ten 1

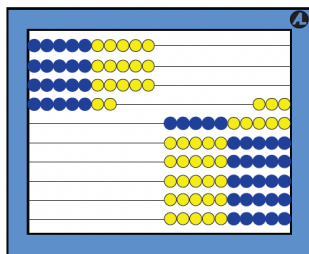
29 → 2-ten 9

Application at home: When discussing math at home, have your child use the traditional name (i.e., "Thirteen") and the math way (i.e., "1-ten 3").

3. Hands-On Materials

The primary hands-on tool for kindergarten, first, second, and third grades is the **Cotter Abacus**. Older grades will also use the Cotter Abacus when new topics are introduced.

The abacus beads are grouped in 5s and 10s, which allows for quick recognition and visualization.



The Cotter Abacus shown with 3-ten 7 (37) entered.

Note that 7 is seen as 5 and 2, making it visualizable.

Other manipulatives regularly used:

- Place-value cards are used to build numbers from left to right.
- A linear model is used for fractions.
- Drawing and geometry tools help children explore mathematical relationships.

5 0 0 0
2 0 0
4 0
6

5 2 4 6

1									
2					2				
3		3		3		3		3	
4		4		4		4		4	
5		5		5		5		5	
6		6		6		6		6	
7		7		7		7		7	
8		8		8		8		8	
9		9		9		9		9	
10		10		10		10		10	

4. Problem Solving

The purpose of math education is to engage the student to think, not just blindly follow the process.

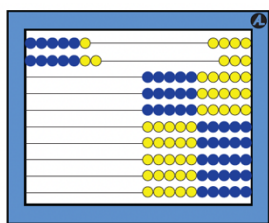
In class, children will often be asked to solve a problem in more than one way and be asked to explain their thinking to the class.

Application at home: Help your child see math as solving puzzles, building persistence.

5. Learning the Facts

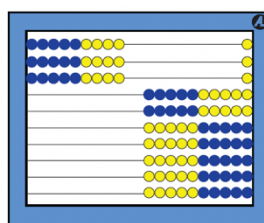
Children will learn math facts with strategies and visualization. Multiplication and division facts are also approached through patterns on the Cotter Abacus.

Two-Fives Addition Strategy



Adding $6 + 7$ by seeing two groups of 5 (blue beads), and 3 (yellow beads) more.

Multiplication Strategy



Multiplying 9×3 by seeing 30 minus 3.

6. Games

Games are used for practice and repetition because they are more motivating, interesting, and less anxiety-producing than worksheets and flash cards. Flash cards and timed tests give the false impression that sheer memorization is the goal and thinking is not expected.

Application at home: Play math card games daily to ensure your child is developing fact fluency.

7. Geometry

Geometry is much more than an abstract high school course about proofs. Geometry helps us describe and understand our world and its structures.

Kindergartners will learn about parallel and perpendicular lines. First graders will work with combining triangles. Children in second grade and up will work with small drawing boards and tools. They will draw triangles and divide them into halves, fourths, and other fractions, measure figures, and find perimeters.

Application at home: Encourage your child to discover geometry in nature and architecture.

8. A Parent's Role

Your attitude toward math is very important. Math is a way of thinking, not a bag of tricks to memorize. Help your child view mathematics as a wonderful tool to learn about.

Questions? We're here to help!

RightStart™ Mathematics

888-775-6284

info@RightStartClassroom.com

RightStartClassroom.com