Math fact fluency is the ability to recall the answers to basic math facts automatically and without hesitation. Fact fluency is defined as "quick recall without the use of tools."

## **According to Rocket Math:**

"Math fact fluency is critical because it is a "tool skill." Meaning it is a tool used in the process of doing other math problems. Developing this tool skill makes learning math easier as concepts get more complicated. This tool skill needs to be automatic in the student's brain to save precious short-term memory resources.

Math fact fluency can be compared to reading. Students must recognize words automatically to comprehend the author's meaning. Otherwise, they will spend too much time decoding individual words.

When students are fluent in math facts, they are focused on the math process as a whole rather than stopping to puzzle out the facts. This is important for three reasons:

- 1. Students with math fact fluency make fewer errors
- 2. Math fact fluency makes learning math easier
- Students who have developed math fact fluency enjoy math and always complete their work."

## K-5 Fluency Benchmarks At-A-Glance

GRADE	START October 1	MID March 1	END May 1
Kinder		<ul> <li>+6 prob/2 min</li> <li>-6 prob/2 min</li> <li>Sums (+) and minuends (-) to 10</li> </ul>	<ul><li>+9 prob/min</li><li>-9 prob/min</li><li>Sums (+) and minuends (-) to 10</li></ul>
1st	<ul><li>+20 prob/2 min</li><li>Sums (+) and minuends (-) to 10</li></ul>	<ul> <li>+20 prob/2 min</li> <li>-10 prob/2 min</li> <li>Sums (+) and minuends (-) to 14</li> </ul>	<ul> <li>+20 prob/ 2 min</li> <li>-20 prob/2 min</li> <li>Sums (+) and minuends (-) to 18</li> </ul>
2nd	<ul> <li>+ 20 prob/2 min</li> <li>-20 prob/2 min</li> <li>Sums (+) and minuends (-) to 18</li> </ul>	<ul> <li>+ 20 prob/min</li> <li>-20 prob/min</li> <li>Sums (+) and minuends (-) to 14</li> </ul>	<ul> <li>+ 20 prob/min</li> <li>- 20 prob/min</li> <li>Sums (+) and minuends (-) to 18</li> </ul>
3rd	<ul> <li>+ 30 prob/2 min</li> <li>- 30 prob/2 min</li> <li>Sums (+) and minuends (-) to 20</li> </ul>	<ul> <li>+ 30 prob/2 min</li> <li>- 30 prob/2 min</li> <li>x 30 prob/2 min</li> <li>Products (×) and Dividends (÷) to 100</li> </ul>	<ul> <li>+ 30 prob/2 min &amp; - 30 prob/2 min</li> <li>x 30 prob/2 min</li> <li>÷ 15 prob/2 min</li> <li>Products (x) and Dividends (÷) to 100</li> </ul>
4th	<ul> <li>+ 35 prob/2 min</li> <li>- 35 prob/2 min</li> <li>x 35 prob/2 min</li> <li>÷ 20 prob/2 min</li> <li>Products (x) and Dividends (÷) to 100</li> </ul>	<ul> <li>+ 40 prob/2 min</li> <li>- 40 prob/2 min</li> <li>x 40 prob/2 min</li> <li>÷ 30 prob/2 min</li> <li>Products (x) and Dividends (÷) to 100</li> </ul>	<ul> <li>+ 50 prob/2 min</li> <li>- 50 prob /2 min</li> <li>x 50 prob/2 min</li> <li>÷ 40 prob/2 min</li> <li>Products (x) and Dividends (÷) to 144</li> </ul>
5th	<ul> <li>+/-/x/÷ 50 prob/2 min</li> <li>Products (x) and Dividends (÷) to 144</li> </ul>	<ul> <li>+/-/x/÷ 50 prob/1.5 min</li> <li>Products (x) and Dividends (÷) to 144</li> </ul>	<ul> <li>+/-/x/÷ 50 prob/1.5 min</li> <li>Maintain fluency (+, -, x, ÷)</li> <li>Products (x) and Dividends (÷) to 144</li> </ul>



## Elementary Parents,

SCA students in grades K-5 continually practice math facts at school. However, to master the facts, it is important for students to practice and review at home as well. A few ways to help at home would be flash cards, practice tests, and multiple counting or skip counting. Another great tool to help students practice math facts is the suggested website <u>99Math</u>.

Many assessments, formal and informal, will be given throughout the year in the classroom. There are three fluency benchmarks for students to meet throughout the year: *Start, Mid, and End.* 

Based on the benchmark assessments, all students will have a notation on the report card in the Work Habits section (see below). In some grades, there will also be a percentage grade given as part of students' math report card grade.

In addition, students in grades 2-5 have the opportunity to receive an end-of-year Fact Fluency Award if they have met the O standard by the End benchmark.

Report Card Notation: Assessing student knowledge of basic math facts (+, -, ×, ÷):

0	90 - 100%	
S	80 - 89%	
N	60 - 79%	
U	0 - 59%	