Your child will be participating in the MathFacts in a Flash program. This guide is designed to answer your questions about MathFacts in a Flash. If you have additional questions please contact your child’s teacher or visit the MathFacts in a Flash website at: www.renlearn.com/mf.

**What is MathFacts in a Flash™?**
MathFacts in a Flash is a computer software program that allows teachers to give students, at all levels, essential practice on their addition, subtraction, multiplication, and division facts, as well as other mental math skills such as squares and conversion of fractions, decimals, and percentages.

**How does MathFacts in a Flash™ work?**
1. **Baseline Test:** Students complete a timed test for each new math level.
2. **Personalized Practice:** Students practice a variety of problems at their current level, including any problems missed on the previous test.
3. **Timed Tests for Mastery:** Students complete 40-item timed tests.
4. **Automatic Advancement:** Students move to the next level after meeting their goal on the test.
5. **Instant Information for Teachers:** Detailed reports give teachers an instant snapshot of student progress.

**Why is it important for students to master math facts?**
Computational proficiency with whole-number operations is dependent on sufficient and appropriate practice to develop automatic recall of addition and related subtraction facts, and of multiplication and related division facts. Practice allows students to achieve automaticity of basic skills—the fast, accurate, and effortless processing of content information—which frees up working memory for more complex aspects of problem solving. (Final Report of the National Mathematics Advisory Panel, 2008.) In other words, mastering math facts through the use of MathFacts in a Flash provides the foundational skills necessary for computational fluency and problem solving, which leads to success in more advanced mathematics.

**What math levels are students tested on?**
With MathFacts in a Flash, students practice and test on up to 71 levels in addition, subtraction, multiplication, division, squares, and conversion of fractions, decimals and percentages.
MathFacts in a Flash™ End-of-Year Benchmarks

<table>
<thead>
<tr>
<th>Operation</th>
<th>Benchmark (master by the end of)</th>
<th>MathFacts Benchmark Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition</td>
<td>Grade 2</td>
<td>Addition Review 2</td>
</tr>
<tr>
<td>Subtraction</td>
<td>Grade 3</td>
<td>Review +, -</td>
</tr>
<tr>
<td>Multiplication</td>
<td>Grade 4</td>
<td>Review +, -, ×</td>
</tr>
<tr>
<td>Division</td>
<td>Grade 5</td>
<td>Review +, -, ×, /</td>
</tr>
</tbody>
</table>

How do students master levels in MathFacts in a Flash™?
Students master levels by answering 40 questions correctly within their mastery time goal. The teacher can adjust mastery time goals per student and per level to provide the most appropriate challenge for each student. Students can challenge their best times.

How will I know how my child is doing?
If your child’s school is using the Renaissance Place version of MathFacts in a Flash, you can access your child’s MathFacts in a Flash data through Renaissance Home Connect™ from any web-enabled desktop computer, laptop, or tablet (seven inches or larger). The school will provide information about how to access to the program. In Renaissance Home Connect, you log on with the same user name and password as your child. Here you can view your child’s current level, and the problems that she missed on her last practice or test—either at home or at school. You also have the option to receive an email notification each time your child masters a level in MathFacts in Flash at school. You can have up to six people receive automatic emails each time a student completes a MathFacts in a Flash level.

Are there other ways to monitor my child’s progress?
A TOPS Report is generated after your child completes a MathFacts in a Flash session at school. This report provides feedback on your child’s understanding of their math facts. The teacher may send the TOPS Report home with your child. Review the report, sign it, and send it back to school with your child.

Renaissance Home Connect
The research is clear—students do better in school when parents are involved. Renaissance Home Connect links the school and home, making math practice even more effective. By logging on from your home computer, you and your child can receive instant updates on progress toward math goals.

TOPS Report
This report provides immediate feedback on a test the student has taken. TOPS reports are available instantly after each session at school to help you assure student mastery of math facts throughout the year.
Can my child use MathFacts in a Flash™ at home?

Yes! By logging on to Renaissance Home Connect, your child can practice the same math facts at home that he practices at school, or he can practice at any level. Your child can choose whether to practice or test for each level. Practices focus on the problems that your child missed on a test, plus other difficult problems from that level. Tests are timed, and cover every problem in the level. Tests taken from home do not count toward level mastery at school. Students can also see which levels they have mastered. To see the Renaissance Home Connect pages in Spanish, click Español.

My child does not have access to the Internet at home. How can she practice her math facts from home?

Teachers can print flash cards or worksheets on the same levels that are in the computer program. Students can take the printed sheets home to increase their math facts practice. Your child's teacher may also allow your child to use a Renaissance Responder™ or NEO 2™ at home for additional practice.

How can I help my child with his math facts at home?

• Actively encourage math facts practice the same way (and for the same reasons) you might encourage practice of a musical instrument or an athletic skill. Students practice for speed and accuracy.
• Work with your child to practice the math facts that he missed on practices or tests. These problems are listed on the TOPS report that your child gets at school, and on-screen after each practice or test if your child is using Renaissance Home Connect.
• Practice facts with flash cards that you have at home or with printed flashcards that your child brings home from school.
• When you practice with flash cards, sort the cards into “correct” and “incorrect” piles.
• Review the incorrect problems and then insert correct problems between them for further practice. This helps students with fact retention.
• Ask your child to read missed problems aloud while writing them for practice.
• Help your child see the relationship between a missed fact and another fact that he already knows. Examples:

<table>
<thead>
<tr>
<th>Missed fact</th>
<th>Known fact</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 + 9 =</td>
<td>8 + 8 = 16</td>
<td>8 + 8 is 16, so the answer to 8 + 9 is just one more than 8 + 8, or 17</td>
</tr>
<tr>
<td>7 x 6 =</td>
<td>6 x 7 = 42</td>
<td>7 x 6 is equal to 6 x 7</td>
</tr>
<tr>
<td>24 ÷ 8 =</td>
<td>8 x 3 = 24</td>
<td>24 ÷ 8 =___ means the same thing as “What number multiplied by 8 equals 24?”</td>
</tr>
</tbody>
</table>

• It is best not to force students to memorize facts before they have learned the concepts in school. Check with your child's teacher about which are the most appropriate MathFacts in a Flash levels to practice at home.
• Know your child's mastery time goal—the target time for correctly answering 40 problems in a level. Find it on the TOPS Report or on the opening screen of either School Results or Home Results in Renaissance Home Connect.
• Develop a simple reward system for home math facts practice. It's important to notice and reward your child's efforts in addition to her progress. For example, you might reward
  - time spent practicing
  - number of facts practiced
  - lower time than last session
  - greater accuracy than last session
  - 100% accuracy with the mastery time goal
• Find ways to link the math facts that your child is learning to practical activities. Let your child see when you use math facts day-to-day: figuring change, balancing a checkbook, or with any estimation.