

Dear **Rocket Math** user,

Rocket Math—the App will help you learn single digit math facts to the level of automaticity, where you can answer facts without hesitation or having to stop and figure them out. Here are a dozen things you should know about the app.



- 1) EVERYONE STARTS AT LEVEL “A.” Just as in the paper-and-pencil version of **Rocket Math** you must earn your way through the levels (A-Z) by being fast and accurate with the answers. You cannot skip around or jump ahead. *[Even if you have worked your way up the levels on the paper and pencil version and “deserve” to be in a higher level!]* I designed it that way because that practice is (1) very good for you to learn the facts to automaticity, (2) the main point of using the app, and (3) the only way to guarantee your continued success using the app (and with math facts in life).
- 2) YOU CAN PURCHASE EITHER **Rocket Math** Addition/subtraction or Multiplication/division or BOTH! If you have both versions on your device you can switch between them. You must begin with the first operation and work your way into the second operation. *[Either addition and then subtraction, or multiplication followed by division]*. After completing both operations you can then choose which one you want to play after that. Note that the app does not sync between devices (that wouldn’t work well in schools!).
- 3) WHERE SHOULD A STUDENT BEGIN? Early elementary students should do **Rocket Math** Addition/subtraction. Third grade students are ready for **Rocket Math** Multiplication/division when they understand multiplication and can figure out multiplication facts such as 7 times 9, however slowly, on their own. Students who can’t figure out addition facts using their fingers are not ready to do **Rocket Math** at all. Students need to understand the operation before beginning to memorize answers.
- 4) PARENTS OR TEACHERS CAN ACCESS THE SETTINGS SCREEN. On the Mission screen tap the Settings icon on the upper left to access the Settings Screen. Parents or teachers will have to touch the two circles simultaneously to access the Setting Screen. This will allow them to set up three different students, to reset any learners back to Level A, to access Student Reports, to contact us, like us on Facebook and give app feedback, or (YIKES!) to start all the learners over at Set A. **Student Reports** show what’s been accomplished, what facts have been learned and how many times a student had to start over.
- 5) THIS IS A BIG DEAL! Learning math facts to the level of automaticity is the secret to success in math. This is important. It is also a mental challenge, which is why so many children do not master math facts. You should be impressed at your progress through the levels as it represents serious accomplishment. The first few levels are relatively easy and go quickly, but then it gets harder as you are expected to remember ever more facts. You should be proud of your accomplishment of working through the levels. Tell others how you are doing so they can encourage you to keep going.
- 6) THREE PHASES WITHIN EACH LETTERED LEVEL. At each level new facts are introduced. In the “Take-off” phase you learn those new facts. If you can answer them quickly and without error you have “taken off” with that set. The next goal is to go into “orbit” with the recently learned facts.

Once you have “achieved orbit” with that set of facts, the challenge is to take that set “into the universe.” The universe phase includes any of the facts that you have learned so far. You must be fast and accurate on all of those to pass the level.

- 7) **ACHIEVEMENTS SCREEN.** After you pass a level, the program shows a picture of a rocket covered by black lettered tiles. After a level is passed the tile for that level is exploded, revealing more of the picture. The tiles left on the Achievements Page show the levels left to complete. This represents a summary of your progress in achieving the important accomplishment of learning math facts. At any time the Achievements Screen can be accessed by tapping the little yellow rocket in the upper right of the screen (which will also repeat the explosion!).
- 8) **PRINTING THE ACHEIVEMENT SCREEN.** Tapping the key in the upper right hand corner of the Achievements Screen goes to another Parent/Teacher option requiring them to simultaneously touch both moving circles. The white parent options box will allow parents or teachers to share the Achievements Screen via email, SMS messaging or printing the picture.
- 9) **TAKING THE BREAKS IS IMPORTANT.** When a level requires more than fifteen problems to complete, the app gives a short break after fifteen problems are completed. This breather allows you a chance to look around, take a drink, or just relax. Take as long as you need, but if you are anxious to complete a level you can start again immediately. Just hit “GO” to continue.

But there is also a **30 minute break** in the program. After five continuous minutes of play, the app times out at the next opportunity. The app tells you that the batteries must recharge. We know that being able to play this app until you wear out makes you begin to hate practicing. We know that five minutes at a time, several times a day (over weeks or months) is the best way learn these facts for the long term. Just do something else and keep the device nearby OR let another person play who is on the list. You might be frustrated by having to take a break, but after the break you will be rested and will enjoy "playing" the app as long as it takes for you to learn all the facts.

- 10) **KEEP THE SOUND UP.** The correction procedure is provided audibly by the application, so the sound has to be turned up. You can tell the sound is up when you can hear the ding as an answer is entered. The reinforcement for finishing parts is also provided audibly, which is another reason the sound has to be turned on.
- 11) **EARPHONES RECOMMENDED BUT NOT REQUIRED.** Use of earphones is recommended, but not required. Earphones ensure that you can hear the corrections and reinforcement, even in a noisy environment. Earphones also provide peace and quiet to those around you.
- 12) **HIT THE CHECK MARK (✓) TO ENTER ANSWERS.** After typing an answer, you can wait the three second time available, at which point the program will recognize that the right answer has been entered—and move on. But for faster and more exciting play you should hit the check mark (✓) immediately after typing the answer. Also note that after an error, you will be told to “go again” at which point the program will not move on until the correct answer is entered and you hit the check mark (✓).

Thanks, and happy learning! --Dr. Don Crawford