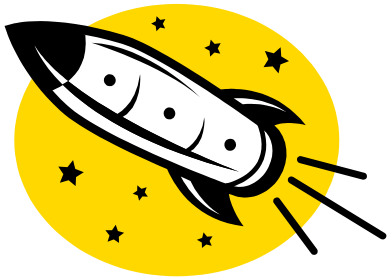
Rocket Math Flashcards

Directions

Helpful Hints for Happier and More Effective Flashcard Practice



(or…"Flashcards Without Tears")

So you have tried flashcards and they didn't seem to be making the difference you were hoping for. It's not your fault. There are some things that many people don't know about the use of flashcards. It's not really an X-File, but there are some secrets out there. I put them into this brochure and wait until you see how well these flashcard strategies work!

The proper use of flashcards guarantees the necessary conditions for learning to occur. (Read as: You can do this your way, but I've been there, done that and this way works better.) The best conditions for learning are *having a few things to learn in a **sea** of mastered material!*

Work with a fairly small deck, of no more than 12 cards at one time. This is called your working deck. (or you could just go sit on a deck with a beverage and … WAIT. NO. There will be time for that later.)

Only 3 of the 12 cards in your working deck should be "new" or "hard." The other 9 should be things the student has already mastered. * *[This is why the first 9 cards in the* Rocket Math *addition and subtraction flashcards just ask the student to identify the numeral on the flashcard.]*

(Mix up the working deck periodically to change the order in which the facts are presented…just in case.!)

** The one time you can give a student more than 3 different "new" flashcards is when they are all answered by the same rule. An example is multiplying by "1"—as all of the variations employ the same rule "any number times 1 equals that number."*

Students should practice by reading aloud the whole problem on the flashcard and then saying the answer from memory. Saying the whole problem and then the answer is very important as it creates the verbal chain. Eventually, after many repetitions, an amazing thing happens. Whenever the student reads "eight times seven" in any problem, (even later, in multi-digit problems) the answer "56" pops into their minds unbidden. (I try to use the word "unbidden" at least once in everything I write – just because I can.) This automatic coming-to-mind is called "automaticity" and is the goal of facts practice.

The student should say the answer without any hesitation. I really mean NO hesitation! Now I will say that a few different ways to prove that I am really serious. I want students to practice facts until they are as automatic as saying their name. If even a slight pause is needed to think of the answer, I want them to practice until it comes to mind without any effort at all. This will enable them (after these facts are learned) to concentrate on the higher functions of math.

Each time an error or hesitation is made, the helper should follow the following correction procedure.

You really need to do this correction procedure. The correction procedure is part of that "secret important stuff" that I warned you about earlier.

1. Helper states the correct problem and answer immediately. (If the student has said the right answer but hesitated the helper can confirm it by saying, *"Yes, that's right. Nine times six is fifty-four, but you hesitated, so let's practice that some more."*
2. Have the student repeat the problem and answer three times.
3. Put the card back 3 cards from the front, so it comes up again before the student forgets it. *(Rinse and repeat as necessary.)*

Note that this same correction procedure is to be used each time there is an error or hesitation. If the student hesitates again after the card has been put back three spaces, just repeat the correction procedure, put the card back three cards and repeat until there is no hesitation. Extra practice on a fact to lock it into memory is important work and should not be considered a bad sign. THAT is what we are doing here!!!

Practice sessions should be short enough so that students want to continue when you stop. Work no more than 3 or 4 minutes in a session. Really! Only 3 or 4 minutes of "good" practice in one session is the best technique. —or until the student has gone through the working deck three times in a row "perfectly" –that is without any hesitations or errors. Younger students may only last 2 or 3 minutes before getting restless and distracted. Try to stop before they get restless—while they are still having fun. That way it will be much easier to get them to practice the next time.

Give at least a 15 minute break before doing another short practice session.

☞ If you watch a TV show together, doing the flashcards during the commercial breaks would make perfect length practice sessions and the sessions would be spaced out very nicely. Ya gotta love those commercial breaks.

It is very important to practice at least once a day. If you let a couple of days go by between sessions a lot will be forgotten and progress will be much slower and more painful. (painful for the helper AND the student) Everyday practice is essential and two or three short sessions each day is even better.

Add new cards to the working deck only on days when the first "cold" run-through of the deck goes "perfectly." When you pick up the flashcards the first time of the day (cold run-through), and you go through them with your student, if the student does not hesitate on any fact in the deck only then is it time to add new cards. Rushing to add more is really a mistake. This is yet another part of the "the secret."

Note: You should find yourself going through yesterday's deck perfectly at the start of the first session on most days. If not, then you may need to consider doing more practice sessions each day (or practicing more regularly if you are skipping days).

Add only three new cards, and only after the cold run-through has gone perfectly.

Create room for the three new cards in your working deck by setting aside the three oldest flashcards in the aforementioned working deck. *[This is why I numbered the Rocket Math Flashcards in the order of the sequence in which facts are learned in the program. All you have to do is remove the cards with the lowest numbers from the working deck, and replace them with the lowest numbered cards that haven't been memorized.]*

Put the cards removed from the working deck into a review stack of the mastered facts.

Practice the review stack every 4th or 5th session. Practice of the review stack should proceed without hesitation. If there are no hesitations, then once through is enough.

If there is a hesitation or error in the review stack follow the same correction procedure as above. Keep working with the review stack until the student goes through it "perfectly."

So now you know everything there is to know about using Rocket Math Flashcards. Keep these directions at hand (or you can re-print them from the Free Resources page of the Rocket Math website). If you start using the flashcards and are not feeling like things are going well, reread the directions and be sure that you are not taking any short cuts or disregarding any details or techniques.

Now go. Get moving. Someone you know needs to learn their facts. Get busy. You can do this!

Dr. Don