

Overlearn Multiplication Facts With a Deck of Cards

“Tennis players, singers, and painters don’t seem to have much in common, but they all get better by gradually improving timing, speed, and accuracy.”

Daniel Coyle, The Talent Code, 2010

We’ve had remarkable success teaching kids their math facts quickly and deeply using a deck of playing cards. They find the cards much more inviting than the old flash cards. (You can buy them at a Dollar Store or Walmart.)

Use this code with the cards:

Joker = 0

Ace = 1

Cards 2, 3, 4, 5, 6, 7, 8, 9, 10 = the number you see on the card

Jack = 10

Queen = 11

King = 12

Have your child hold the deck with the front down.

Start with the 2’s fact family. Say your child flips a card; it’s a King. Because he is practicing 2’s, he should call out “24” as quickly as possible. Follow the “2-Error Rule.” Say your child flips eight cards and then makes his second error. Those eight cards are now the perfect amount for his brain to work on. Practice these cards with your child for a few minutes. Tomorrow, practice these same eight cards for 3-5 minutes.

The next day, take that same pile of cards and see if he can do them with a 100% accuracy. If so, add more cards to this stack until he has a pile that he only made two errors on. Practice with that deck as above until he is 100% accurate. Repeat this process until he can do the entire deck (52 cards) with no errors.

Now that your child has automated the 2’s fact family, it’s time to build speed. Time your child on the entire deck of cards. How long does it take? Keep practicing until he can play the deck in a minute or less. A child who can play the cards at this speed knows his fact family effortlessly—to automaticity.

Next, move on to the 3’s fact family. Follow the steps above. Again, he should eventually be able to work his way up to playing the entire deck in a minute or less. Quickly review the 2’s family daily before you practice the 3’s. Your child’s brain needs the review, and the sense of accomplishment will keep him motivated.

Continue to play until your child can say each fact family in a minute or less.

If you want to provide additional practice, try the following:

1. After your child plays awhile, you'll figure out what fact family is most troublesome for him. (Usually, it's the 7's, 8's or 12's.) You can provide additional practice by telling him the value of the Jack, Queen, and King is no longer a 10, 11 or 12 but is now 8, or whatever fact family you want to provide additional practice on.
2. Tell your child that while he is playing you will change the fact family. You might start off playing the 7's. As he plays, call out a different fact family, for example 12. Your child immediately stops multiplying by 7 and changes to multiplying by 12 and continues with it until he hears you call out another number.

Questions? Ask here:

WowzaBrain.com/blogs/news

Keep in Mind: Kids who know their multiplication facts to automaticity find higher level math easier. This is because they can keep their focus on the math problem they are trying to solve and not waste precious "mental space" on trying to remember a multiplication fact like 8×7 .