

### **Fact Fluency Apps:**

- Sushi Monster by Houghton Mifflin Harcourt, *free*
- Monster Math : Kids Fun Games by Elementary Facts, *free*
- Math Balance : Games for Kids, *free*
- Addition & Multiplication Number Bubbles by Unripe Grape, *free*
- MathEdge Addition, *free* (or \$2.99 for paid version with subtraction)
- MathEdge Multiplication or Division, *free*
- Addition or Division Flash Cards by Eggroll Games LLC, *free*
- Multiplication or Division Flash Cards by Eggroll Games LLC, *free*
- Basic Facts by Math Adventures, *free*
- Number Find by Math Adventures, *free*
- Basic Facts by Math Adventures, *free*
- Math Slide: tens & ones by Math Adventures, *free*
- Math Slide: add & subtract by Math Adventures, *free*
- Math Slide: multiply & divide by Math Adventures, *free*
- Math Slide: hundred, ten, one by Math Adventures, *free*
- Math Slide: Basic Facts by Math Adventures, \$2.99
- Math Flash Cards ! by King's Apps, \$0.99
- Operation Math by Little 10 Robot, \$2.99

### **Two-Step + Multiplication App:**

- MathEdge Multiplication, *free*

### **Long Division App:**

- MathEdge Division, *free* (or \$2.99 for paid version)

### **Other:**

- The General Card Game: split the deck between two players. The players each flip over the top card in their deck at the same time. First one to find the correct sum, difference (larger number - smaller number), or product wins both cards. The goal is to win all the cards in the deck. If there is a tie, each player takes his or her card back. If you play with face cards, Joker can be considered a zero, Jack is 11, Queen is 12, and King is 13.

## Fun ways to Practice Math Facts at Home

**Play with dice.** Really. Toss the flash cards and practice adding, subtracting, and multiplying using the numbers you roll on dice.

**Flashlight math.** Use the flashcards and flip two cards at a time. Children shine a flashlight on the one they know and answer that one. Simple. Don't have a flashlight? Make a math wand. Use a stick or a light saber. Anything that interests your child! !

**Use electronics.** Take advantage of the many apps and websites that do the trick! IF you have five minutes and your child says, "Can I play a game on your phone?" Say, "Why yes you may, I'm so very glad you asked."

**Write the answer.** Or paint the answer. Water on cement or chalk on sidewalk or window crayon on window. One person flashes the cards and the other one writes. !

**Math Bingo.** Again, toss the flash cards and play math bingo as a way to learn and practice these numbers.

**Answer Races.** Stand on one side of the room and make your child run to the other side of the room to write the answer on a long piece of roll paper on the floor or taped to the wall.

**Go crazy!** You flip the card and say it in one voice and the child says the answer in the same kind of voice (whisper, grumble, shout, squeaky, princess, movie character, etc.).

**Skype or Facetime** with family members and have them flash the cards and the child says the answers.

**Tricks** can work pretty well, especially for hard to remember facts. For example, multiplying a number times 2 is the same as the double of the number in addition,  $7 \times 2 = 7 + 7$ ; or remembering the product of  $7 \times 8$  by counting 5,6,7,8 ( $5,6, = 7, \times 8$ ); or when solving for x11 facts, double the digit being multiplied by 11 (up to  $9 \times 11$ .) etc. !

**Mnemonic Devices (or stories)** have proven to be the best for students with learning disabilities, but they work for everyone. For example, "You have to be 16 to drive a  $4 \times 4$ ." or "Picture a football coach feeding his 7 linemen 7 cans of beans each, so they can beat the '49ers."

**Limit the facts to be learned at once.** Sort a stack of flashcards into piles; those that are known automatically and those that are not. Practice one or two unknown facts at a time along with known facts until they become automatic.

**Use timers.** Each night, give 1, 2 or 3 minutes to answer as many math facts as possible given a sheet of problems or a stack of flashcards. Chart the number right and celebrate/reward increasing automaticity.

**Use music.** There are a lot of CD's and some DVD's that do this. One that comes to mind is Schoolhouse Rock.