

# KIDS Strategies to Increase Math Fluency

ACADEMY

[www.kidsacademy.mobi](http://www.kidsacademy.mobi)

If you've ever studied a foreign language, chances are someone has asked you whether you are fluent in the language. We usually mean this to say that we are comfortable in reading, speaking, and writing the language, comparable to a native speaker. But did you know that this concept of fluency isn't just limited to learning a second language? So why is math fact fluency important?



In many ways learning math is sort of like learning another language. For young children, it's all about constructing a knowledge and concept of numbers and the many ways they work together and apply to the real world. When we take a step back, we can truly understand the huge undertaking it is to learn math from scratch! To be comfortable working with numbers and completing math operations, one must become fluent in the language of math. Children must build their number sense in order to make sense of the numerical world. In other words, kids need to build math fluency.

Join us as we examine math fluency a little more deeply and examine the myriad of ways to increase math fact fluency at home and in the classroom.

## What is Math Fluency?

It's important to remember that math fluency is so much more than simply memorizing math facts. Using the above analogy, memorizing words and definitions when learning a second language never guarantees we know how to use those words in a sentence when communicating. Likewise, merely memorizing math facts doesn't get a child very far if they don't know how to use those math facts and complete mathematical operations.

[Math worksheets](#) can help your child learn general math operations.

Math fluency is what educators and parents alike are striving for when they set out teaching math facts. Better put, math fluency about understanding mathematical concepts to the point of feeling confident in completing math processes and solving problems. It's when one can complete can tackle a math task without hesitation and feel comfortable in knowing what to do and how. Just like a fluent language speaker can comfortably communicate with others using the language, kids who are fluent in math have mastered age-appropriate and grade level math with confidence.

While this might seem like an impossible concept to believe that students can be fluent in math, remember that kids learn and grow at different rates. Building math fluency can take many years, and parents cannot expect their little learners to achieve complete fluency in skills as students will be learning new mathematical concepts until they graduate from high school!

Rather, as parents and teachers, we can help kids build math fluency in the skills they already know or are learning to contribute to their overall fluency with math facts. In the end, we want kids to understand the math they complete and have the ability to explain their thinking.

Fortunately, there are quite a few ways to help little mathematicians to improve math fluency. Try the following tips to help your child build fluency at home or in the classroom.

[Play & Learn Math](#)



Watch on [YouTube](#)

## Strategies to Increase Math Fluency

### 1. Good old-fashioned practice

It probably goes without saying that kids need ample practice if they are to build any skill, whether it's reading or math. But when it comes to math, it's a lot like learning a language, as mentioned above. To learn a language, it's important to be exposed to native speakers, and immersive techniques are used in many schools to help kids dive into the language and practice using it constantly.

Similarly, it's important to reinforce math facts with consistent practice through lessons at home and in school. Most educators already know that teaching a concept once is not enough for a student to learn it. Though kids may seem to understand a concept upon first glance, when it's time for them to perform the same operation, they might forget, or fall short. That means plenty of time must be allotted to practice math, and parents can mix in math lessons and practice into a child's everyday routine when given a little forethought.

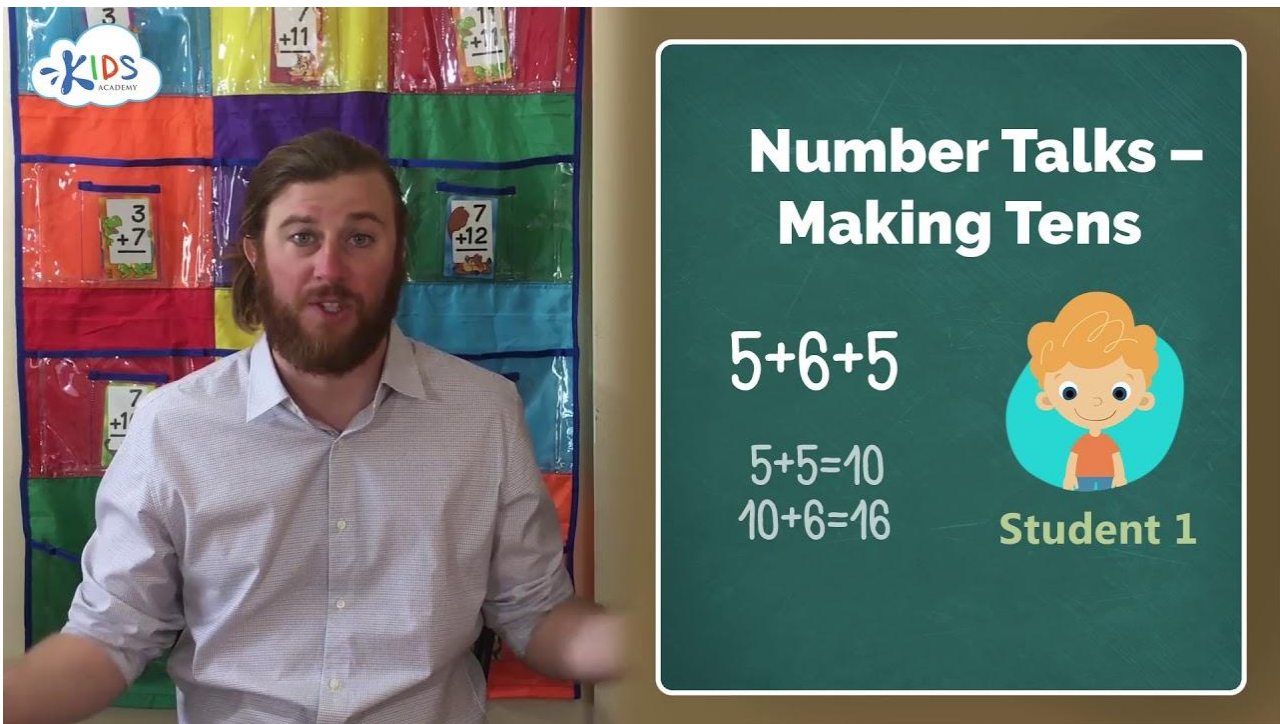
For example, daily math exercises can be as simple as:

- Practicing math at the grocery store while buying items
- Using fractions while cooking or baking at home
- Keeping math manipulatives on hand and engaging during playtime
- Play family [learning games](#) that include math
- Building a daily or nightly routine that features frequent math practice



## 2. Flex and hone mental math skills

Mental math is having the ability to complete math problems so well that we can complete them in our heads! Obviously, by the time we can complete mental math to some degree, we have mastered the concepts and stored the information in our long-term memory. We can consider mental math to be the ultimate indicator of math fluency. That's why it's so important to [incorporate mental math](#) wherever possible to help your child practice skills in which he or she is already fluent. Thankfully there are many ways to help your child practice mental math. Try out the following ideas:



**Number Talks – Making Tens**

$$5+6+5$$
$$5+5=10$$
$$10+6=16$$

**Student 1**

Watch on [YouTube](#)

- Ask math questions and problems aloud, preferably without a visual aid. If your child struggles, encourage him or her to visualize the problem, and allow enough time to let your child process the information and generate an answer.
- Flash cards are great for mental math! Without pencil and paper to work out the problems in a longer, more structured way, children are faced with the necessity to solve it in their heads.
- For kids who have been working on a skill for a while, build speed and fluency with short drill activities that force kids to solve problems as quickly as possible. Be sure not to use this technique in a way that frustrates or upsets struggling kids. Be sure that kids are reasonably comfortable with the skill and provide just enough challenge to work out those mental math skills.

## 3. Offer variety

Kids should experience math and solve problems in a variety of ways to learn math inside-out. Especially with a subject like math, a student can easily get stuck or

frustrated if they learn only one way to complete a problem. Some methods work better or worse than others for certain individuals, just like with any other skill.

That said, it's important to get creative to offer different ways of present concepts and problems. To do this, provide a plethora of activities for your child. Use math manipulatives or [math videos](#) to give your kids a hands-on method of experiencing math. Get actively involved with your child's math lessons, activities, or projects. Use games, journaling, math apps, or flashcards to mix up your child's lessons. Plan your child's activities ahead of time to ensure that a variety of different types of practice is offered for your child throughout any given week.

#### 4. Make it fun!

When students are frustrated, they aren't having fun! Conversely, when students are having fun while learning, they tend to gain a better appreciation or even develop a liking towards a subject such as math. Further, you can guarantee engagement, and increase the chances that your child is actually learning or working towards mastery if he or she is having fun!

To make math lessons and activities more fun for kids, try the following ideas:

- Make it a competition! Invite friends, siblings, or family members to join in the fun and create a competitive game involving the math skill your child is working on.
- Use card games, dice or dominos to create new and engaging games to play with your child.
- Help your child create their own game. When kids take ownership over an activity, they form a sense of pride. Meanwhile, teaching another friend, sibling, or family member the game is the best way to learn and retain new information.

#### 5. Don't bite off more than your child can chew

Most of us have heard the age-old colloquialism that kids retain information like a sponge. Though kids have a remarkable ability to retain new information, children are only human and can absorb so much at once. When planning math lessons and activities, keep in mind that your child should only focus on a limited amount of new information at once. In fact, it's best to scaffold information, and teach math concepts that are related.

Some focused strategies to help kids learn and retain information quickly might include using songs, math tricks and shortcuts, mnemonic devices and flash cards. One great strategy for teaching related math facts would be to use fact families when teaching addition and subtraction.

By now, you're probably no longer asking why math fact fluency is important, as it's clear that kids need to be fluent in the skills they've already mastered to keep moving forward in their education and learning. Luckily there are a multitude of ways and strategies to use with kids to increase fluency in math every step of the way. Try some of the above techniques and watch your little mathematician's skills blossom!

Play & Learn Math

