

Why is Math Fact Fluency Important?

Math fact fluency is the ability to efficiently and flexibly recall mathematical facts. Math fact fluency is an important part of mathematics. Research has shown that long-term success in mathematics is tied to strong number sense and this includes fluency with basic math facts. So why do students need to be able to fluently recall math facts?

- It builds the foundation to tackle more complex problems. If students use all of their time and energy trying to figure out the math facts, the tasks may seem overwhelming to them. It reduces the cognitive load of the problems if students already know the math facts.
- Students stay focused on the problem rather than focusing on the facts.
- Students feel confidence when they know their facts and are much less likely to have anxiety about math.
- It contributes to the ability to solve more difficult problems quickly and more accurately.

Developing math fact fluency does not have to involve rows of problems on a worksheet or timed tests. There are many fun ways your child can practice math facts. Our Illustrative Mathematics curriculum builds number sense and fluency through repeated practice in daily warm-ups and center activities. Some classrooms also work on fluency through online practice.

Below are the math facts we work on by grade level. If your child has mastered one level, go ahead and start working on the next! Note that the goals below are fluency goals. Students still work on solving problems with larger numbers within the grade levels using manipulatives, pictures, diagrams and equations.

- Kindergarten- Flexibly and efficiently adds and subtracts within 5.
- 1st grade- Flexibly and efficiently adds and subtracts within 10.
- 2nd grade- Flexibly and efficiently adds and subtracts within 20.
- 3rd grade- Flexibly and efficiently multiplies and divides within 100 for multiples of 0,1,2,5,10.
- 4th grade- Flexibly and efficiently multiplies and divides within 100.
- 5th grade- Flexibly and efficiently multiplies multi-digit whole numbers.
- 6th grade- Flexibly and efficiently multiplies and divides multi-digit numbers.

Ways to help your child with fluency of math facts:

- Deck of cards or dice: Using a deck of cards, take out the face cards. Deal out all of the cards. One player says, 'Draw' and both players turn over their top 2 cards and place them face up in the center. The players decide who has the largest value using addition, subtraction or multiplication depending upon the level of your child. The largest value gets to keep the cards. Keep playing until all cards have been used. The person with the most cards at the end wins. You can also do this with dice and keep track of points. With dice, students learn to see groups of numbers, which helps them develop good number sense! Here is a link to more card and dice games:

<https://www.weareteachers.com/math-card-games/>

<https://mathgeekmama.com/math-dice-games/>

- Flash cards
- Center game: Your child's teacher will choose a center game for you that works on fluency. Just ask them if you would like a copy!
- Online games/practice: Here are just a few free resources:
<https://www.multiplication.com/games/all-games>
https://www.mathplayground.com/ASB_Index.html
https://www.abcya.com/games/math_facts_game
<https://www.splashlearn.com/math-skills/math-facts>
<https://www.factmonster.com/math/flashcards>
<https://www.mathpyramid.com/math-facts-games>

It's important to note that some students may need more practice than others. That is alright. Just keep making it fun and keep in mind that the more they know their math facts, the easier it will be for them to master new math strategies and skills.