Simple, Actionable Improve
Their Math Grade

Simple, practical, actionable

## WHAT'S INSIDE:

quick and easy diagnostic most-common mistakes to avoid focus checklist and more

Google
Reviews \＃\＃\＃＊

Amadeus Ciok is an educator and an entrepreneur，with passion for learning，fitness， math and psychology．
He is the founder of Learn Vibrant Math Tutoring－highest－rated math tutoring company based in Mountain View，CA and the author of Learn Vibrant Method．

During his 12 years of math tutoring experience，he has helped 100 s of students improve their math grades，ace their classes，boost their SAT scores and more．

Learn Vibrant helps middle school and high school children with math．Our tutors are rigorously selected，thoroughly trained and come from top US schools：UC Berkeley，UCLA and more．We help children progress in math with the focus on long－ term expansion through the development of their confidence，analytical thinking and learning enthusiasm．

Does your child need help with math and a confidence boost？

# What you will find in this short ebook: 

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Easy 4-step diagnostic you can do to
check if your child understands the material

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Top 5 most common math study mistakes children make

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class even if they score $100 \%$ on homework

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focus at home (checklist)

Does your child need help with math and a confidence boost?

# Easy 4-step diagnostic 

to check if your child understands the material

## * <br> Step 1

Open your child's textbook or they're notes on the chapter they're covering You can open up their notes or whatever source of problems you can find - that they use in class: textbook, online notes, online worksheet or a solution sheet.

STEP 2
Pick a random problem with the answer.
Ideally something from the middle of the sheet, homework or chapter (not the most basic problem). You can usually find the answers in the back of the textbook, or on the answer key or the last page of the homework.

## STEP 3

Copy the problem onto a sheet of paper (without the solution) and let your child solve it.

## STEP 4

After they get the answer, check if it is correct.

## Why it works

This short evaluation answers the most important question:
Can your child solve the problem correctly?

A lot of students make a big mistake of "passive learning." Your child may mistakenly think that reading the textbook or watching videos helps them really understand the concepts. Your child might say they understand this chapter "for the most part."
Giving them an intermediate-level problem reveals the truth.
There are several levels of understanding, but to put it simply:
in math, your child can either solve a problem correctly or they can't.
If they can't, they don't fully
understand the concept they're learning.

What if ...

## ... your child made a very "minor" mistake?

This can't be detected just by checking the answer. However, if you're concerned about that, give your child 2-3 different problems. If they, in fact, only made a very insignificant mistake, they will not repeat it 3 times in 3 different problems. Be cautious, however: fundamental mistakes are not necessarily minor and they are often mistakenly dismissed to the detriment of the student's progress.

## ... they say they really get it?

Your child isn't lying to you. They simply don't know how much they know.
This check-up helps you evaluate how much your child actually knows. Students usually don't have a good idea of how much they really know. Their self-assessment is based on their feeling, not on how much they are actually able to solve.

## ... the problem was too hard?

If you pick a problem from the homework or worksheet assigned for your child, it is going to be at an easy to intermediate level. You aren't going to pick the problem that is "too hard" unless you pick from the very end of the chapter from the textbook, where the more complex problems are.

## ... they solve it correctly?

If your child solves it correctly, great!
It's not conclusive that they understand the whole chapter, but it is definitely a good sign. If you want to, give them 3-4 more problems. Pick problems that look different to you. That will ensure that you give them variety.

# More thoughts on 

why this diagnostic works, passive learning and practical understanding.


#### Abstract

Most students struggle to acquire what we call the "practical understanding" of math. They have seen solutions. They have listened to their teacher talk about it. But they haven't solved the problems independently. Perhaps your child only watches their teacher solve problems, copies them into their notebook and concludes that they "get it." (to find out, ask your child what they do in class)


It s a very common misconception!

The real, true understanding is the practical understanding, where your child understands the concepts and is able to use them to solve problems. That's how students do well in math.
This check-up allows you to check just that.

# TOP 5 most common math study mistakes children make 

## MISTAKE 1

## Passively reading the textbook

Math is about solving problems. The only way to truly understand math is through solving problems. That means actively understanding the concepts, how to use them, how to solve problems step by step and how to know if the solutions are correct. This is called a practical (proactive) learning style. If your child passively reads their math textbook, they can't truly get math.

## MISTAKE 2

## Reviewing the notes

Similarly to reading the textbook, reviewing the notes doesn't help your child. Yes, it is a good first step. But it is only the first step. They need to solve problems. Find mistakes. Understand the mistakes. Correct them. And solve more.

## MISTAKE 3

Solving the problems they already solved, again.
Re-solving the problems they already solved is, for the most part, a waste of time. There are plenty of examples available to practice solving similar problems of the same type. It also establishes a bad habit of recalling the exact solution of the specific problem instead of following the method and the logic behind it.

## MISTAKE 4

Assuming they have mastered the material because they finished the homework Homework is, unfortunately, only the first step. In order for your child to truly master the material, they need to follow a learning sequence: understand problems, solve problems, find mistakes, analyze mistakes, correct mistakes, solve similar problems. Due to the variety of problems, no difficulty progression in the homework structure and lack of useful feedback, homework cannot help your child fully master the material, or even get them to the level where they can stop struggling in math.

# Why your child can fail their math class 

even if their homework score is $100 \%$.

## There are 3 major styles of homework your child may encounter:

completion - when your child's teacher checks if your child completed the homework
correctness - when your chld's teachers checks your child's answers
self-check - when your child checks their homework independently

## What is the problem with all of these "methods"?

In order to fully understand math concepts, your child needs to:
solve problems
find their mistakes
analyze and understand their mistakes
correct their mistakes
solve more similar problems

If your child's teacher only checks their homework for completion, your child doesn't learn anything because they have no way of knowing if (and why) their solutions were incorrect!
If the homework is checked for correctness, that's a little better but your child will only know which problems they have gotten wrong, without knowing the most important part - the why and the logic behind it.
If your child needs to check their homework on their own, if (and it's a big if) they end up actually checking their work, they would need to know how to find their mistakes and learn from them. Without this process, checking the homework is pointless.

As you can see, whichever popular homework style your child's teacher uses, your teenager could score $100 \%$ just by solving all the problems incorrectly and still not understand math. They can, for example, solve $60 \%$ of the problems correctly, get their teacher to check their homework and mark the incorrect answers, and still not learn how to actually do them right!

## Homework is often easy in comparison to tests.

Parents often come to us, frustrated, because their children get 100\% on their homework and do their best to complete it, yet score very poorly on tests. Some students score 90-100\% on their homework and literally fail tests. Besides using an ineffective homework style, some teachers (especially in AP and Honors classes) assign easier homework and give children harder problems on tests and quizzes. The level gap between children's homework and test levels causes frustration, lack of confidence, and sense of hopelessness.

## 7 powerful ways to help your child focus at home

(especially if they struggle with focus and are glued to their phone all day)turn off the phone or put it into silent modeturn off the TVhave water and snacks on the table

turn off notifications
work on your focus in all-in 10-min bursts

Does your child need help with math and a confidence boost?

## Is Your Teenager Struggling With Math?

## Schedule your FREE 15-minute phone consultation today.

## Discover:

3 Exact ways your child can improve their math grade quickly, including:

- the instant change in attitude and relief of stress and overwhelm
- quick, 30-day grade and confidence boost
- long-term development of their analytical thinking skills.

Exact examples of how we have helped children in the same situation as your child skyrocket their progress and how we can help your child as well.

## To Schedule Your Free Consultation, go to learnvibrant.com/get-started call us at 650-353-0769 or email us at amadeus@learnvibrant.com.

"My son went from a B/C math student to a solid A in honors!"

- Marybeth Nacey, Willow Glen
"Our daughter's grades were dropping dramatically and she really needed help to succeed in Geometry Honors. With the help of Amadeus she went from a D to a B. This school year Amadeus helped her to score 100 of 100 on her Algebra 2 Final."
- Erika Lundblad, Milpitas


## Join our webinars.

Do You Want Your Child To Improve In Math?

## Join our webinars on topics:

- Improving math grade and boosting your child's confidence
- Acing math class, getting to $92 \%$ and beyond
- Boosting SAT Math score
- Getting ahead in math and progressing through summer time


## Don't miss out!

Join other parents of teenagers and learn proven, effective tips and strategies.

## Go to www.learnvibrant.com/free-webinars



