

Is Your Child Ready for AP Physics 1?

A Parent's Guide to Helping Your High Achiever Thrive in AP Physics 1



Kumu Ras Cas (Christopher Castagne)

AP Exam Grader · 15+ Year Educator · Founder, Master AP Physics (M.A.P.P.)

WHAT'S INSIDE

- ✓ Why your high-achieving child may struggle in AP Physics 1
 - ✓ The 5 skills AP Physics assumes they already have
 - ✓ A readiness checklist to find the gaps before school starts
- ✓ The M.A.P.P. 4-week summer program — what it covers and how it works
 - ✓ Real student results and how to get your child's free diagnostic

masterapphysics.com

The A-Student Trap

After 15 years in the classroom and grading AP exams, I can tell you something that surprises most parents: the students who struggle most in AP Physics 1 are often the strongest students in the school. I have seen a class of straight-A students average a D in the first quarter. In my experience, these students almost always fall into one of two groups.

The “Whiz Kid”

Quick pattern-recogniser. Great memory. Rarely had to work hard. Not in the habit of showing work or thinking step by step.

In AP Physics: wants to do things their own way. Struggles with structured reasoning and letting go of misconceptions that feel right but aren't.

The “Hard Worker”

Diligent student. Does every assignment. Good at learning by repetition. Usually succeeds because the test looks just like the homework.

In AP Physics: Gets completely thrown with College Board questions which often look nothing like class. Linear thinking struggles with the variety of situations presented.

The Confidence Crash

Most parents brace for a grade drop, but are caught off guard by the impact it can have on a high achiever's sense of identity. Suddenly, a student who has never struggled starts questioning their ability. With college applications looming, the anxiety builds. They spend more time on homework but get more frustrated, not less, and the activities that keep them balanced start disappearing too. One difficult class can quietly unravel a lot.

The acronym **M.A.P.P.** is intentional. Students often tell me they feel **lost** in AP Physics. My job is to give them the tools and the approach to **orient themselves and figure out how** to get from where they are to where they want to go. I don't tell them **what** to think. I teach them **how** to think.

AP Physics can be mastered, and with the right preparation, your child does not have to learn any of this the hard way. **The M.A.P.P. Summer Program exists precisely to get ahead of the curve.** We build the foundations, the mindset, and the approach before the school year has a chance to test them.

*If you'd like to talk through your child's specific situation first,
you're welcome to book a free 15-minute call below — no diagnostic required.*

Is Your Child Ready for AP Physics 1?

APPhysics 1 assumes students already have these 5 foundations. Most don't—and that's exactly why they struggle in Week 1.

1	Algebra Fluency Solving for unknowns, rearranging equations, and working with fractions and negatives — quickly and accurately. <i>Quick check: Can your child rearrange. $F = (Gm_1m_2)/r^2$ to solve for m_2 without a calculator?</i>
2	Trigonometry Basics Understanding sine, cosine, and tangent. Knowing when to use them to break a force or velocity into components. <i>Quick check: Can your child find the horizontal and vertical components of a vector at 30°?</i>
3	Reading and Sketching Graphs Interpreting graphs— understanding what slopes, areas, and intercepts represent, and recognizing the difference between linear, curved, and flat relationships. <i>Quick check: A car is slowing down. Would its position-time graph be straight or curved? What would the velocity-time graph look like?</i>
4	Scientific Notation and Unit Conversion Comfortable moving between m/s, km/h, kg, and g. Able to handle numbers like 9.8×10^2 without confusion. <i>Quick check: Can your child convert 72 km/h to m/s in under 30 seconds?</i>
5	Proportional Reasoning Understanding what happens to one variable when another changes — essential for AP free-response questions. <i>Quick check: The distance an object falls from rest is given by $d = \frac{1}{2}gt^2$. If an object falls for twice as long, how much further does it travel?</i>

- If your child cannot answer 3 or more of these quickly, they have gaps that AP Physics 1 won't slow down for. That's exactly what the M.A.P.P. Summer Program fixes.

*Not sure how your child measures up against these 5 foundations?
Take the free M.A.P.P. Initial Diagnostic — see page 5 for details.*

The M.A.P.P. Summer Head-Start Program

4 Weeks · Starting July 6, 2026 · Small Group Live Zoom Sessions

Week 1 Math Foundations

Algebrafluency · Trigbasics · Scientific notation · Unit conversion

Week 2 Graphs and Visual Reasoning

Readingmotiongraphs · Sketchinggraphsfrom descriptions · Proportional reasoning

Week 3 Introduction to Kinematics

Distance vsdisplacement · Velocityandacceleration · Kinematic equations · Free fall

Week 4 Forces and Newton's Laws

Free body diagrams · Netforce · Newton's1st, 2nd and 3rd Laws · Applied problems

What's Included

- ✓ Free diagnostic assessment
- ✓ 2 × 1-hour live Zoom sessions per week
- ✓ Weekly homework with answer key
- ✓ Recorded video tutorial explanations
- ✓ Session recordings emailed after each class
- ✓ Group chat for questions and reminders
- ✓ Personalized 1-on-1 support as needed

Pricing is personalized.

We'll walk you through pricing on your free call — either after your child's diagnostic, or right away if you'd rather talk first.

The Physics Precision Pathway™ (a.k.a. the M.A.P.P. Method)

M

Measure

Use ongoing diagnostics throughout the course to surface hidden gaps and the common physics misconceptions that quietly hold students back

A

Address

Target weak spots and build new knowledge through multiple modes of instruction — visuals, simulations, and real-world examples

P

Plot

Work with students to translate what they've learned into personalized concept maps and visual problem-solving frameworks for tackling any physics problem

P

Practice

Apply these maps and frameworks to real AP and AP-styled questions of increasing difficulty until the approach becomes second nature

Real Students. Real Results.

Here's what happens when students get the right support.

■ Scored a 5



Darren D. — AP Physics 1 (2017) · PhD Candidate, Quantum Computing

"Studying with Ras Cas gave me a strong foundation in the fundamentals of physics in a non-traditional way, one that encouraged curiosity and exploration. He taught me to genuinely enjoy Physics, rather than solely focusing on performing well on standardized exams. This mindset has served me well on a Physics journey full of twists and turns."

■ Scored a 4

J

Jenny — AP Physics 1 (2019) · Northwestern University, Medill School of Journalism

Jenny started confused and anxious about Physics. Through consistent support, clear explanations, and engaging lessons, she gained both confidence and mastery of key concepts. Her hard work paid off — she scored a 4 on the AP exam and gained admission to Northwestern University's Medill School of Journalism.

S

■ A Grade in Class + Scored a 4

Sajal — AP Physics 1 (2025)

Sajal had never taken physics before, but needed to master the entire AP Physics 1 course in a single semester while balancing band and extracurriculars. Through targeted individual sessions and last-minute exam prep, he earned an A in his school course and scored a 4 on the AP exam.

Ready to Get Your Child Started?

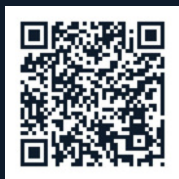
There are two ways to begin — pick whichever feels right for you.

Path 1 — Start with the Free Diagnostic

Get a clear picture of exactly where your child stands before we talk.

👉 www.masterapphysics.com/diagnostic/

Enter your child's email and the timed assessment arrives in their inbox instantly.



Scan to start

Path 2 — Book a FREE Call

Book a free 15-minute call to ask questions and see if this is the right fit for your child.

👉 www.masterapphysics.com/#booking

Enter your child's email and the timed assessment arrives in their inbox instantly.



Scan to start

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Or message "PHYSICS" on Facebook · Instagram · WhatsApp

Summer program starts July 6, 2026 · Limited spots available