

WHY STUDY ALGEBRA?

Did you ever notice that nobody asks why he or she "has" to take English Lit or phys-ed? But math and science are much more crucial to the basis of a modern technological society than are *Moby Dick* or the rules to dodge-ball. So why do we only hear complaints about math and science? Perhaps because they're hard...? Because they require work and discipline...? Because they aren't always "easy"...?

Modern educationist philosophy in America seems to say that education has to be "fun" and "entertaining" to be justifiable. Today's students often absorb the ethic that, unless a thing is easy, they shouldn't have to bother. ***But most worthwhile things in life are going to require some effort.*** If you want that great job, that interesting career, that open-ended future, you're almost certainly going to need some mathematical skills. And ***algebra is the basis, the foundation, the tool-box, for those skills.***

BUT WHY, EXACTLY, DO I HAVE TO LEARN THIS STUFF?

I don't know what your plans, hopes, or dreams are, or what your future might hold. As a middle school student now, you take math and science courses for much the same reason you learned your alphabet as a young child: ***to lay the foundation for bigger and better things to come,*** and to open up new opportunities for future pleasures and successes.

Nobody can say with assurance what skills will be needed twenty years from now. But what intelligent person would want to cut himself off from future opportunities and growth by refusing to expose himself to knowledge which will be foundational for what is yet to come?

Even in the short term, you'll need some of the skills from algebra. If you're going to work with formulas in spreadsheets, you will need to be comfortable with variables and formulas. *That's algebra.* If you're going to be in meetings involving reports with tables, charts, and graphs, you'll need to be able to interpret these intelligently if you hope to hold your own in the discussions. *That's algebra.*

While jobs and their specific skill-sets may change over time, mathematics won't. Whatever job you get will provide the job-specific training you need, but to get that job in the first place, you're going to need some background knowledge and skills. And to be able to keep up with progress, to keep on top of new skill-sets, to move up the ladder, to jump across into a new and better career field, you will need the flexibility of a broad foundation. That foundation includes mathematics.

The lessons and patterns of mathematics are important. If all you take from algebra is a comfort with variables and formulas, an ability to interpret graphs and to think logically, and a willingness to use abstraction when you try to solve problems, then you have gained some incredibly useful life skills - skills that will open doors, give you options, and allow you to make your own informed choices. Skills that will help you become a better thinker.

The specific algorithms you might study are not as important as the general patterns, techniques, and lessons that you can learn. Don't short-change your future by opting out now.