A Home Education Handbook

Nine Questions to Ask for Simple & Balanced Home-Based Learning

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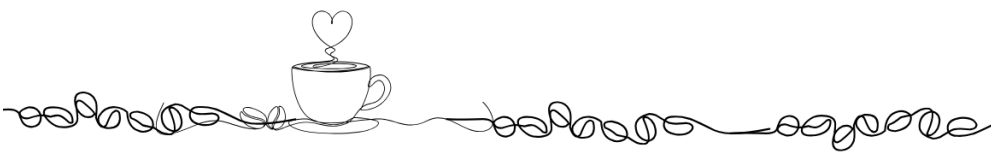
Isaiah 54:13

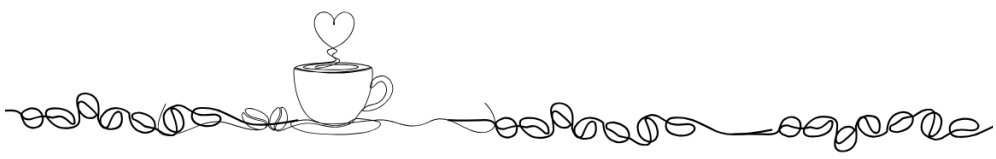


Dedication

To my parents, Kenny & Jenny, thanks for being my first and most important teachers. You showed me that the most important lessons are the ones that happen at home.

To Frank, my favorite tutor and brother, thanks for patiently teaching me geometric proofs even though I never really understood them. Thanks to you, I not only passed high school but I learned how to solve problems (both in math and in life) with a sense of humor. You are missed.

To my kids, who proved that homeschooling is 10% curriculum, 90% coffee, and 100% fun.



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Introduction

"I have never let my schooling interfere with my education."

~ Mark Twain

When we first began our home education adventure, I was caught off guard by the extra hours of free time in our day. At first I was stunned. Then I was somewhat appalled. Finally, I had a sense of relief. In the beginning, I was stunned at how much formal school work we could complete in three hours or less a day. My initial conclusion was that I must not be doing enough. Our homeschooling must be lacking. Obviously, I must be doing something wrong. The kids should not have so much free time on their hands. Then after several years of home educating, I was shocked when I realized it wasn't that our homeschooling was lacking but that the traditional school system was flawed. Because I am a product of the traditional school system, and I was a credentialed public school teacher, I only knew the seven hour school day model. I only knew 50-minute learning blocks, transition bells, textbook tests, and three-hour homework routines. Clearly, this is how learning takes place. Clearly, this is how information is received and retained. Right?! Then as a home educator, I slowly began to realize that the traditional model of school wasted a lot of learning time. Somehow, our family was able to get through most of our formal "school work" in less time than the traditional school day. I finally realized it was because we didn't have all of the classroom disruptions, transition times, endless breaks, and school assemblies. Quite frankly, it was eye-opening just how little time it actually took to get "formal" school work completed. It often left me wondering, "Why are students in school for seven hours a day? Why did they have so much schoolwork left to complete at home?" The answers to these questions led me to understand something very important. Our home education wasn't lacking. I wasn't doing something wrong. We were actually doing something right. Our home education was work-

ing. My children were learning the way they were created to learn. Ironically, this realization created in me a huge sense of relief.

This realization also created a much-needed mindset makeover. Instead of seeing learning as only happening during a set number of hours or while engaged in a set number of tasks, I began to see *everything* as an opportunity to learn. Learning was happening all of the time whether we were diligently doing formal lessons or we found ourselves engulfed in a few impromptu activities. On most days, we could start our "school day" after breakfast and complete our formal lessons by lunchtime. Yet the self-doubt siren would periodically return. She would whisper in my ear, *"They aren't doing enough! You are doing it wrong."* Later, I realized the trick to remaining joyful and content with our home education was to remind myself on a yearly (or sometimes daily) basis that we did not need to do "school at home" for learning to take place. Periodically, there were seasons of our homeschooling that I reverted back to my old way of thinking. If the kids continually finished their school work in less than an hour or two, I would second-guess their learning. If their free time continually out-weighed their formal lesson time, I would self-doubt my abilities as a home educator. I had to repeatedly remind myself learning was happening whether we were sitting at the kitchen table doing math worksheets or if they were creating imaginary worlds in the backyard with the Lego structures they created the day before.

Perhaps my experience isn't your experience. Perhaps your homeschooling experience is quite the opposite. Perhaps, you often find yourself feeling frustrated and overwhelmed because it takes your child all day to do one math lesson. Maybe your family is constantly stuck at home finishing school work while all of your friends are

spending the day at the park. You keep hearing that homeschoolers get all of their work done in three hours or less a day, yet your homeschool day seems to last even longer than a traditional school day. Your experience is causing you to second-guess how and what you are doing. You know in your gut it should not take so much time, but you don't know what to do or how to move in a different direction. You chose to home educate so your children would have more free time to explore the things they loved and to learn at their own pace. You decided to home educate so there would be more freedom and flexibility in not only what your children learned but how and when they learned it. So far, this has not been your experience. You feel like you are a slave to your teacher guide, the state standards, and someone else's schedule. Perhaps the reason for your frustration is because you are doing *too* much (or at least trying to do too much).

If you can relate to either of these scenarios, let's talk. Sit down, my friend. Grab a cup of coffee. Let me share with you a little story. Let me share with you what I fondly refer to as my "Matthew 14 Meltdown." In the early years of our homeschooling, I was a hot mess. On this particular day, I was reduced to a puddle of tears while reading one little Bible passage. I was reading the story of Jesus feeding the crowd of 5,000. This passage often brought me much comfort. Jesus' words in this passage always reminded me that all He wanted was for me to bring Him what I had. All I needed to do was trust that

in His hands, He would multiply my efforts. He would bless my offering. Yet on this day as I re-read this story looking for a bit of solace, I began to weep uncontrollably. As the Lord was graciously encouraging me to bring Him a few loaves of bread and a few little fish, I realized I didn't even have that to give. All that was left in my proverbial basket were just a few stale bread crumbs and a few rotten fish heads! It hit me that day as Jesus effortlessly fed 5,000 people, I could barely muster up enough strength to physically, emotionally, and spiritually feed the few people He had given me. I was struggling to give my husband and my children what they needed. But that day, the Lord gently reminded me in my tears that even my stale bread crumbs and my few fish heads were enough. In His hands, He could do what I couldn't. He could do the impossible. I just had to offer up to Him what I had. I had to faithfully show up each day and give whatever I had to give – however big or small that was. Jesus lovingly reminded me that day I didn't need to feed 5,000 people. I didn't need to teach 3,000 students. I didn't need to mentor twelve disciples. He was only calling me to "feed" (or teach) my two precious children. God was only calling me to nurture, love, and support the three most important people in my life. I realized that day that God was not expecting me to be teacher of the year or to be the world's greatest parent. He was calling me to be a faithful follower. He was calling me to be an obedient servant. He just needed me to show up! God wasn't asking me to teach with all of the bells and whistles or to teach with a particular methodology.

It wasn't God's "To Do List" I was tirelessly trying to complete; it was my "To Do List." I was trying to meet my unrealistic expectations while trying to meet the world's standards. God's standards

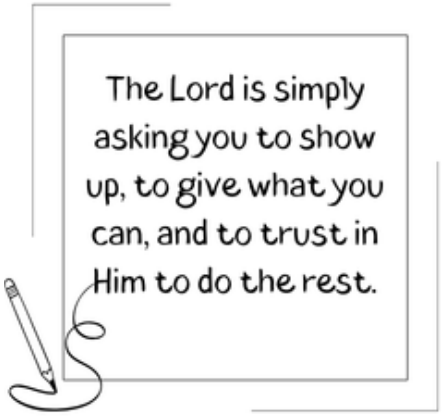
are far less complicated than the world's standards. His expectations are for me to act justly, to love mercy, and to walk humbly with Him (Micah 6:8). His calling is for whatever my hands find to do, I am to do those things with all my might (Ecclesiastes 9:10). The Lord requires me to love Him with my whole heart, mind, and soul and to love my neighbor as myself (Matthew 23:37-39). I realized that day the Lord was simply asking me to show up, to give what I could, and to trust in Him to do the rest. This is why my homeschooling life verse is Isaiah 54:13. *"All your children will be taught by the LORD and great will be their peace"* (NIV). I hung onto the promises in this verse. The Lord taught my children. He taught *all* of my children, not just some of them. Because the Lord was their teacher, they would have great peace. I prayed this verse at the beginning of each school year. I prayed this verse at the beginning of each day. I inserted my children's name in this verse and prayed it on those hard and challenging days. There were many days I needed the reminder that God *will* teach my children, and they *will* enjoy not just some peace but *great* peace. The future tense helped me move forward in the present and to forget any failings in the past.

After my "Matthew 14 Meltdown," I changed my "To Do List" in three ways. When I was checking off items I completed that day or I was checking off work assignments that were completed that week, ironically, my focus was on what we did not finish instead of what we did accomplish. Ultimately, this led to feelings of failure. Even if most of the items on my "To Do List" were completed, inevitably, there were always tasks left undone or unfinished.

First, I changed my "To Do List" to my "Done List." At the end of each school day, I recorded all of the things we did do, all of the

things we did learn, and all of the tasks we did accomplish. Some home educators refer to this as reverse planning. Another way to look at this reverse "To Do List" is to describe it as a "Ta Da List." Gretchen Rubin, award-winning author and podcast host, fondly describes her list of accomplishments this way. "A 'Ta Da List' shifts your perspective – instead of concluding your day dwelling on what didn't get done, it redirects your focus to the remarkable things that were achieved." This perspective is encouraging; it's energizing. (And it is a simple way to record your child's learning and to track his progress.)

The second way I changed my perspective was to change my child's "To Do List" to a "To Be List." My daughter was not created to successfully complete a set of tasks. She was created for a purpose – to become a godly woman with a God-given purpose. My son was not created to master a bunch of skills or to acquire an assortment of facts and data. He was created with a purpose – to become a God-fearing man to live out his God-given purpose. Both were created to become who God created them to be. Instead of focusing on what your child should do, instead, focus on what your child can become. What kind of person do you want your child to be? What kind of character do you pray your child will develop? Spend your homeschooling days working on these life-giving goals. This will make your "To Do List" more meaningful.



The final amendment to my "To Do List" is the topic of this book. By simply changing our homeschool "To Do List" to a "Daily Checklist," I no longer second-guessed myself. I no longer lived with self-doubt. The kids and I also had a sense of accomplishment each and every day. I no longer worried that I wasn't doing enough. I simply changed my "To Do" commands to "Today, did we…" questions. Before sharing my Daily Checklist, I want to address some common concerns that plague many homeschooling moms. Once you eliminate these common concerns and understand these common fears, you will be able to confidently use the "Today, Did We… Daily Checklist."

Part Two:
Today, Did We Checklist

"Education is not about checking boxes; it's about igniting curiosity and cultivating a love for learning that lasts a lifetime."

~ Ainsley Arment


Worship
Read
Rest
Write
Care for home & others
Today, did we...
Create
Solve Problems
Explore Nature
Move
coffeewithcarriecon

How can you simplify your days, focus on what's really important, inspire your kids to be creative, and include beauty in their days? All that is needed is a shift in perspective. Rather than seeing learning as limited to specific hours or a checklist of tasks, understand that learning is a continuous process that happens all the time. Whether your children are engaged in formal lessons or caught up in spontaneous activities, every moment becomes an opportunity for growth and discovery. Shift your homeschool "To Do List" into a "Daily Checklist." If you do this, then at the end of each day, you and your kids will feel a real sense of accomplishment.

At the end of each day, it's helpful to pause and reflect with a few simple but meaningful questions: Today, did we worship together? Did we read something, write something, and create something? Did we solve a problem and explore the natural world? Did we move our bodies, care for our home and each other, and make time to rest? These daily rhythms are the heart of a rich home education. If your homeschool environment makes space for these kinds of experiences, then rest assured—your children are receiving all they truly need.

Keep your days simple and your expectations realistic! Simply ask yourself each day, "Today, did we….." Use this checklist when planning your homeschooling days. If you do, you will no longer worry about whether you are doing enough. This simple change will bring clarity, confidence, and peace to your homeschool days. Let's explore each question.

Chapter 8

Today, Did We Problem Solve?

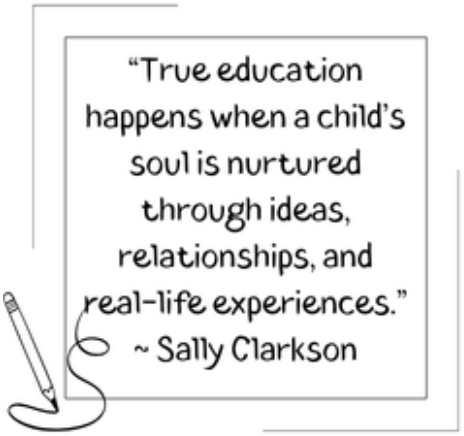
At the end of each day, if you can say, "Yes, we spent time solving a problem (or two)," then you can be confident it was a good day. While you are planning your day (or week), if you include mathematical thinking in meaningful ways, then you can rest assured it will be a good enough day! Home education should focus on the 3 R's: Reading, Writing, and Arithmetic. But don't get stuck on the idea that arithmetic is the only part of mathematical thinking. Mathematical reasoning comes in many forms. It isn't just arithmetic, which consists of calculations and computation. Being proficient in basic computation skills will make the other components of mathematical reasoning easier and quicker. However, arithmetic is only one part of the pursuit of mathematics. Mathematical reasoning also involves problem-solving, critical thinking, spatial reasoning, and mental math skills.

What is the number one question most students ask when doing a difficult math problem? When you were in school, I'm sure you may have asked this question while doing long division or while trying to solve linear equations. *"When will I ever use this in real life?"* Unless a student becomes an engineer, architect, physicist, software developer, or financial analyst, many of these complex, mathematical skills will not be needed as an adult. However no matter what profession or

job your child has as an adult, he will need problem-solving skills. He will use basic computation skills on a daily basis. As a consumer and as an informed citizen, he will need critical thinking skills.

Solve Problems Every Day

Do meaningful and fun problem-solving activities together as a family. Math is used every day. Math is everywhere so include your children in the process. Play fast-paced math games to practice math facts. Keep score and tally points to practice basic calculation skills. Play games with dice and money. Measure and count when cooking. Start a building, remodeling, or gardening project with your family. Geometric formulas for area, perimeter, and volume will be needed as well as computation and measuring skills with addition, subtraction, multiplication, and division. Fractions will be used when building, redecorating, or gardening.



Build your child's financial literacy. Show them how to use coupons and estimation skills when shopping. Create budgets and stick to them. Let your child start a business. Foster their entrepreneurial aspirations. Then help them open checking and savings accounts to help them keep track of their profits and expenses. Use spreadsheets, computer programs, (or old- fashioned pencil and paper) to balance accounts each month. Encourage your child to help or watch you balance accounts. Teach your child to tithe and to give generously. In-

clude your whole family in the process of buying a new car. Include your teen in the process of paying bills, loan options, and stock options. If you use digital currency, give your student a few bitcoins. Show them how to use percentages in sales tax, tipping, and discount shopping.

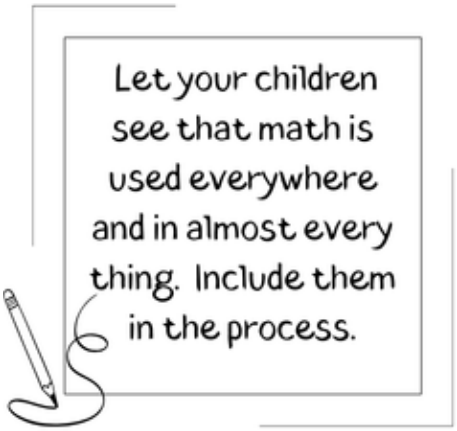
Help your child build spatial problem-solving skills. Read maps (even if they are using Google Maps or apps like Waze™). Build with blocks, magnetic tiles, or Legos™. Solve puzzles. Use manipulatives such as pentominoes, tangrams, and pattern blocks. Play with board games such as Battleship (coordinate graphing), Doozy Dice, or Uzzle.

Help your child build critical-thinking and classifying skills. Play strategy games like Chess, Risk, Codenames, Stratego, Clue, or Mastermind. Do number games such as Sudoko, magic squares, and Nim. Solve analogies, brainteasers, and logic grid puzzles. Play games that require classifying skills such as Set and Qwirkle. Sort and classify toys, Tupperware, clothes, blocks, buttons, pasta—sort and classify anything and everything.

Help your child build discreet math skills, which are needed for programming and engineering, by playing with items such as Snap™ circuit boards, marble runs, Rubik cubes, and wooden (or computer generated) labyrinth games. Help your child to think "outside the box" when trying to solve a problem. Teach them to step back, see things from different perspectives, and experiment with different ideas. Let

your child fail. Foster the Thomas Edison view of learning through failure. Edison once stated about his experiments with electricity, *"I have not failed. I've just found 10,000 ways that won't work."* Even conflict resolution uses critical thinking skills. If your child had an opportunity to resolve an argument, to debate an alternative idea, or to learn to compromise, he did some important problem-solving during his day.

The most obvious way to include problem-solving in your child's day is to do a math exercise in a textbook, solve a set of computation problems, or complete a math workbook page. Arithmetic skills build on each other. They are learned best through short, consistent lessons. Computation skills are retained when practiced consistently. However these skills can be learned and reviewed in a variety of ways. The most common way is by completing a set of problems in a math curriculum, but practicing computational skills can also be through games and real-world applications such as cooking or problem-solving activities.



Let your children see that math is used everywhere and in almost everything. All of these examples are mathematical reasoning and problem solving opportunities. Mathematical reasoning or problem solving does not only occur during the 30 minutes your child is doing a math lesson. Your children will use not only their calculation and mental math skills while doing exercises in their math books, but

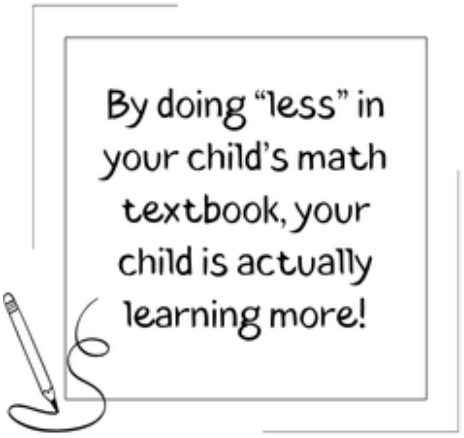
they will be using their problem-solving and critical thinking skills while playing games, running a business (or household), and resolving conflict. It may not all be arithmetic, but it is all math!

Math Skills to Learn

In my book, *Just Breathe (and Take a Sip of Coffee): Homeschool Simply and Enjoyably* I share the concept of "Less is More." I discuss how doing "less" can actually reap "more" academic learning. This is true even in the area of mathematics. When teaching your child how to calculate and how to solve problems, adapt the motto, "Less is More." Like grammar textbooks, most math workbooks are also extremely repetitive. For this reason, the first few chapters of most traditional math textbooks (approximately one-third) review the math skills learned in the previous grade level. Then the majority of the textbook will be new, more advanced math skills to learn. Surprisingly, the last few chapters of most traditional math textbooks (about one-fifth) actually spend time introducing computation skills that will be learned in the next grade level. With this in mind, if your child uses a traditional math curriculum, then he really only needs to complete the middle section (or 50%) of his math workbook.

For example, a typical fifth grade math textbook begins with review of place value concepts, addition and subtraction computation, multiplication and division procedures, and comparing and ordering whole numbers. On average, a traditional math textbook will have 10-12 chapters. This means that the first four chapters of your child's fifth grade math textbook is a review of 1st, 2nd, 3rd, and 4th grade math skills. The bulk of the fifth grade curriculum focuses on fractions, decimals, and percents. Students build their fractional and dec-

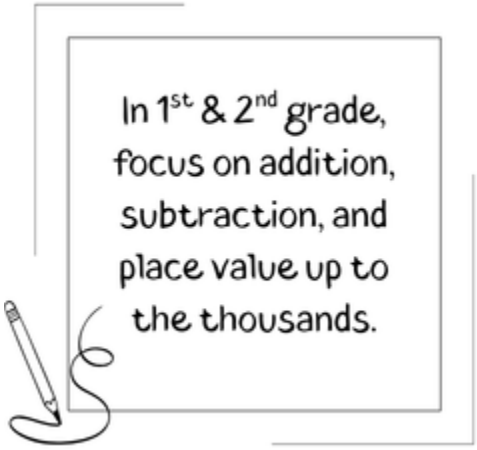
imal number sense and how to calculate problems using each form. For example, how to halve a recipe using fractional notation (½), how to figure out a 50% sale cost, or how to understand what a .50 GPA is. Students use fractions in measurement and geometric formulas. They use decimals with money and with very large and very small numbers, and they use percentages and ratios to solve geometric and real world problems. The final few chapters of a traditional fifth grade math textbook introduce advanced topics like coordinate graphing, pattern recognition for algebraic functions, and computation with angles, polygons, and circles that are used in pre-algebra and simple trigonometric conversions.



It isn't necessary to spend time on the first review chapters of each math text book knowing the review of past skills will be embedded in each lesson's practice problems and that the understanding of past skills will be applied when working with the new math concepts being introduced. Knowing that the last several chapters will be introduced and covered extensively the following year when the skills are needed and more age-appropriate, you realize it isn't necessary to even finish the traditional math textbook. By eliminating almost half the chapters in a traditional math textbook, it gives your child more time to understand, practice, and master the skills necessary to learn at his current math level. By doing "less" in your child's math textbook, your child is actually learning more!

So what math skills should be taught at each grade level? After evaluating most math textbooks, it is easy to see the following patterns. One grade level introduces a skill and the following grade level reviews it. In Grade One, students are primarily introduced to place value of whole numbers and the operations of addition and subtraction. They learn the addition and subtraction facts and how to add and subtract single and multi-digit numbers. They are introduced to the concept of regrouping and how to apply it when adding and subtracting.

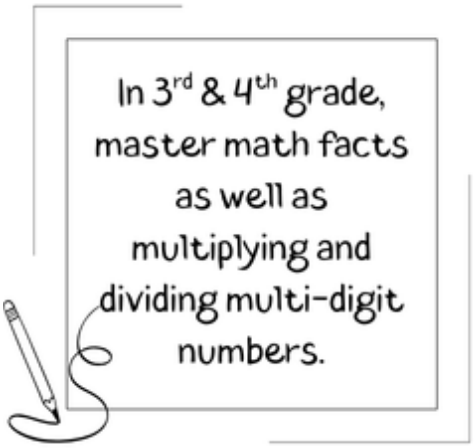
In Second Grade, students continue to hone their computation skills and place value number sense by adding and subtracting money and larger numbers as well as comparing and ordering larger numbers. Basically, your child has two years to learn, apply, and master addition and subtraction with basic facts up to multi-digit whole numbers and money notation. That's it! Take your time teaching addition and subtraction to your 1st and 2nd grader.



In Grade Three, students are introduced to the operations of multiplication and division and place value with very large numbers. They learn the multiplication and division facts and how to multiply and divide single and multi-digit numbers. In Fourth Grade, students continue to hone their computation skills and place value number sense by multiplying and dividing multi-digit numbers as well as comparing and ordering very large numbers. They are introduced to the concept of averages and how to apply it

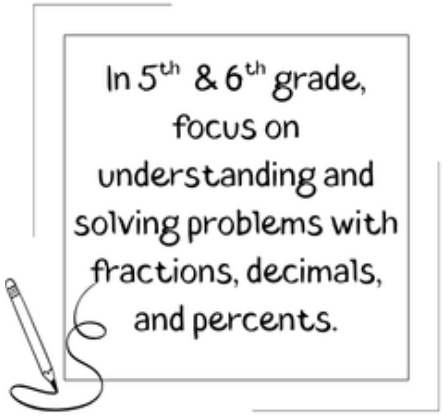
when dividing, and they are introduced to the concept of area and how to apply it when multiplying. Basically, your child has two years to learn, apply, and master multiplication and division with basic facts up to multi-digit whole numbers. That's all! Take your time teaching multiplication and division to your 3rd and 4th grader.

The pattern continues in middle school. In Grade Five, students are introduced to rational numbers (fractions, decimals, and percents) and place value with numbers less than one. Since fractions, decimals, and percents are different ways to represent the same number, fifth graders learn how to convert fractions into decimals and percents and how to convert percentages into fractions and decimals. They also learn how to add, subtract, multiply, and divide with fractions, decimals, and percents.



In Sixth Grade, students continue to hone their fractional and place value number sense by computing with fractions, decimals, and percents as well as comparing and ordering very small rational numbers. They are introduced to the concept of ratios and proportions and how to apply them when computing with rational numbers, and they are introduced to the concept of rate, taxes, commission, and discounts and how to apply them when computing with percentages. Basically, your child has two years to learn, apply, and master number sense and computation skills with rational numbers. That's it! Take your time teaching fractions, decimals, and percentages to your 5th and 6th grad-

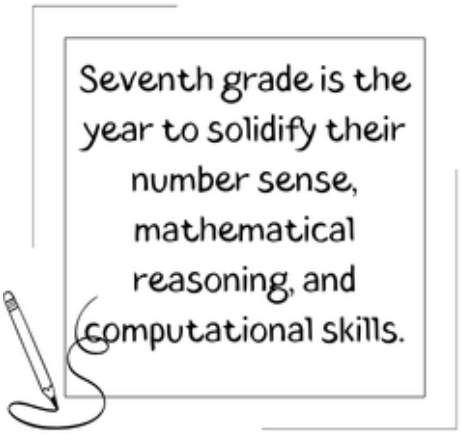
er. A solid understanding of rational numbers and a strong foundation computing with rational numbers will ensure success in high school mathematics.



In Grade Seven, students are introduced to the concept of "pre-algebra." Basically, they are sharpening their place value and computation skills with whole numbers and improving their proficiency with rational numbers while being introduced to a few algebraic concepts. In seventh grade, students should master all of the skills learned so far. Seventh grade is a great year to solidify their number sense, mathematical reasoning, and computational skills. They are introduced to absolute value, integers (positive and negative numbers) and order of operations. Seventh graders are also introduced to simple equations and how to solve expressions by applying formulas. For example, they learn how to insert values and solve problems with the Interest formula (I = PRT), Distance Formula (D=RT), and a variety of geometric formulas (LxWxH, ½ bh, πr^2, etc). In Eighth Grade, students either continue to sharpen their proficiency with whole numbers, rational numbers (fractions, decimals, and percentages), and integers, or they begin Algebra 1.

Basically, your child has another year or two to learn, apply, and master foundational computation skills needed to succeed in Algebra. That's all! Take your time introducing formulas, order of operations, and computation with integers to your 7th and 8th grader. If your student hasn't mastered computation with whole numbers and

rational numbers or how to use formulas to solve problems, then do not worry about spending a year or two introducing algebraic concepts like integers. If your seventh grader still hasn't mastered basic computation skills with whole numbers and rational numbers, then there is no need to spend time teaching them how to solve one and two step equations. Actually, your child has been solving "equations" since first grade. (e.g., 3 + □ = 5.) They will have plenty of time to elaborate on these skills when they are officially introduced in Algebra 1. Spend this time instead solidifying their basic computation skills.



If you do not use a formal math curriculum, then use different activities and games to teach these foundational skills at each grade level. Change your mindset to "less is more" with regards to mathematics. Your student's computation, estimation, and problem-solving skills will improve if you focus on "less" each year.

Advanced Mathematical Pursuits

Should every student be forced to learn higher mathematical concepts such as algebra, geometry, trigonometry, and calculus? In my book, *Homeschool High School: A Handbook for Christian Education (2024)*, I give a rather unpopular opinion. However, it is a very realistic and transparent answer. The only reason a teen truly needs to study advanced mathematics is if the teen's post graduation goals involve

entering a professional field that requires higher mathematics such as Euclidian geometry and/or calculus. If your teen intends to pursue a career in mathematics or science, then his high school course of study should include at least four years of complex, advanced mathematical studies. Everyone else really only needs Algebra 1.

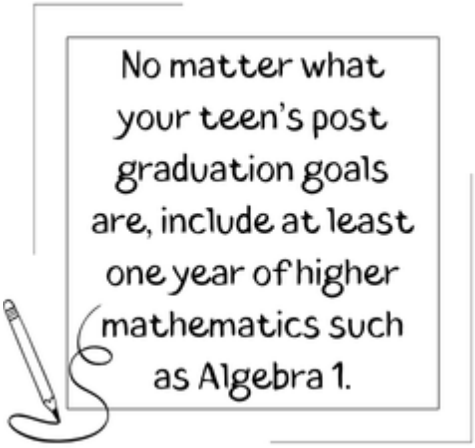
If your teen's post graduation goals depend on attending a four year university no matter what area of study she pursues, then Algebra 1 should be included in her high school course of study. Notice I didn't say she should master Algebra 1 with a 4.0 as the final grade. However, developing the foundations of algebraic thinking will help your student successfully complete her general education requirements in the area of mathematical studies when she does attend college. Another reason for the non-science or non-math college major to study at least Algebra 1 in high school is because most states require at least two years of higher mathematics including Algebra to graduate high school. Once your teen meets the state's math graduation requirements, then she can pursue applied mathematics such as personal finance, formal logic, business mathematics, entrepreneurial studies, and/or economics.

If your teen's post graduation goals include learning a trade, entering the workforce, starting his own business, or running a household, then he should at least hone his computational skills and focus on the mathematical skills that will be needed in his chosen career. For example, a chef needs proficient measuring and conversion skills, a cosmetologist needs knowledge of ratios and percentages, and an electrician needs to know how to apply formulas and unit conversions. Artists and designers need spatial problem solving such as proportions and knowledge of the Golden Ratio as well as basic and advanced

geometric skills with lines, arcs, and planes. Musicians need proficient skills with fractions and frequency when composing music, creating chord progressions, understanding music theory, and reading music compositions.

A solid foundation in basic arithmetic skills and computation is needed in every profession or job in some form or another. In high school, your teen can hone his basic computational skills while pursuing forms of applied mathematics such as personal finance, formal logic, business mathematics, entrepreneurial studies, and/or economics.

Even if your teen is not college bound, he should still include Algebra 1 in his high school course of study. Will he need to know quadratic equations, polynomials, and radicals in his future profession? Probably not! However, there are several other important lessons one can learn by learning Algebra. Studying Algebra in high school will further develop your teen's problem-solving skills. Algebra teaches structured approaches to solving complex problems by breaking them into manageable parts, which fosters critical thinking and logical reasoning skills. Studying Algebra also enhances abstract thinking. It develops the ability to work with abstract concepts and patterns, enhancing a person's capacity to handle unknown variables and generalize solutions in different areas and situations. Algebra also trains a person to identify patterns, see relationships, and make connections. Algebraic reasoning enhances



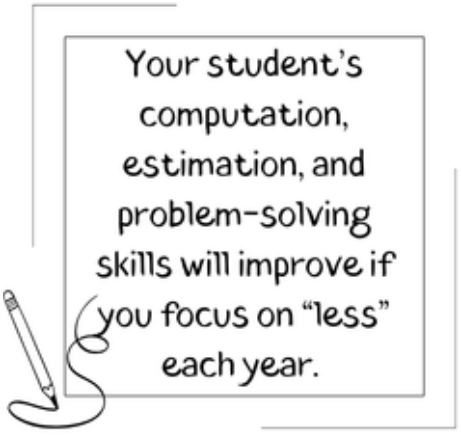
analytical skills by systematically evaluating options, which helps improve decision-making skills. All of these skills have real-world applications. Most importantly, the study of Algebra is a mental discipline; it helps strengthen a person's attention to detail and his perseverance when solving difficult problems or while facing challenging situations. No matter what your teen's post graduation goals are, include at least one year of higher mathematics such as Algebra 1.

Build Math Confidence

Looking at mathematics through the lens of problem-solving skills may actually change your child's (and your own personal) attitude towards math. Perhaps your child has a love-hate relationship with math. Perhaps you have a love-hate relationship with math. A child's math confidence level and math disposition is determined by two things: their personal experience with mathematics and their parent's opinion of mathematics. Statistically, students determine by middle school age if they are "good at math" or if they like math. If a child has positive experiences with math during the foundational years, they are more than likely to have more confidence in their mathematical abilities and skills later on in life. These positive experiences include finding math activities to be fun, doing math activities they feel are meaningful, and having success while doing math-related activities such as computation and calculations. If children are given positive feedback when they successfully solve a problem or when they arrive at a correct answer, it builds their math confidence. If children are given encouragement when faced with mathematical challenges, it creates a positive math disposition. The more success and encourage-

ment a child receives when solving problems, the more likely he will enjoy math and see it as meaningful.

Research also shows that a parent's attitude about mathematics can rub off on a child. When a child hears comments like, "*I was never good at math,*" the child internalizes the opinion that only certain people are gifted in mathematics. Yes, some people are mathematically-gifted or have a higher aptitude for complex math concepts, but everyone has the ability to acquire strong number sense. Some people are "born" with good number sense, but everyone can learn it. If a child continually hears negative comments about math from a parent, then when she experiences challenges while attempting to do mathematical activities, she is more likely to assume she is not one of the "gifted ones" either. If the parent has a negative opinion of math or sees it as "useless," then there is a higher probability, the child will have the same opinion, even if she is good at math. If a child has had negative experiences with math as a child or has been bombarded with negative comments about math, then he or she is more likely to decide he "hates math" by the time he hits middle school age. Then as they attempt to do more complex middle school math skills such as compute with rational numbers and integers, their opinions about math and their ability to do math becomes solidified. If their math experiences continue to be negative throughout the middle school years, then they are more likely to "give up" on math by the time they hit high school level mathematics. Our words and our attitude matter and make a difference.



Today, Did We Problem Solve?

If your child solved a problem (or two) today, then you can say, "Yes, we spent time problem solving today!" You can be confident it was a good day. While you are planning your day (or week), if you include mathematical thinking in meaningful ways, then you can rest assured it will be a good enough day! Stop feeling guilty if your child does not complete a math workbook page each day, or if he isn't using a formal math curriculum this school year. Whether your child is headed for a career that uses advanced math skills or not, teach your child financial literacy, basic computation, and problem-solving skills. In all honesty, these are the real math skills they will need as an adult no matter which profession they pursue. Your ultimate goal is to help your child learn to be a good steward of the gifts God has given, how to manage money responsibly, and how to think critically. Even if your day seemed like a total waste of time, if your child solved a problem (or two) today, then it was a good day.