

Kindergarten
Math
with Confidence

Instructor Guide

KATE SNOW

WELL-TRAINED MIND PRESS

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Table of Contents

Introduction	1
How to Use This Book	2
Unit 1: Numbers to 10	11
Week 1: Numbers 1-4	12
Week 2: Numbers 0 and 5	24
Week 3: Numbers 6-9	39
Week 4: Combinations that Make 10	53
Unit 2: Shapes	65
Week 5: Sorting and Classifying	66
Week 6: Shapes	79
Week 7: Pattern Blocks	92
Week 8: Symmetry	103
Unit 3: Directions and Patterns	117
Week 9: Directions	118
Week 10: Patterns	130
Unit 4: Comparing Numbers to 10	141
Week 11: Compare Without Numbers	142
Week 12: Compare Numbers to 10	155
Week 13: Sequence Numbers to 10	168
Week 14: 1 or 2 More, 1 or 2 Less	179
Unit 5: Addition	193
Week 15: Addition	194
Week 16: Many Ways to Show Addition	206
Week 17: Addition Practice	218

Unit 6: Numbers to 20.....229

Week 18: Count to 20..... 230

Week 19: Combinations of “10 and Some More”242

Week 20: Read and Write Numbers to 20.....256

Unit 7: Measurement..... 273

Week 21: Length 274

Week 22: Weight and Capacity288

Unit 8: Subtraction..... 303

Week 23: Take-Away Subtraction..... 304

Week 24: Take-Apart Subtraction..... 317

Week 25: Subtraction Practice..... 331

Unit 9: Numbers to 100..... 343

Week 26: Numbers to 30..... 344

Week 27: Numbers to 50358

Week 28: Numbers to 100..... 371

Unit 10: Time 383

Week 29: Months and Days of the Week.....384

Week 30: Time of Day395

Week 31: Read Clocks to the Hour..... 407

Week 32: Review and Celebrate..... 421

Helpful Resources430

Scope and Sequence 430

Complete List of Math Books of the Week.....432

Materials List434

Blackline Masters.....435

Introduction

Welcome to *Kindergarten Math with Confidence*!

Kindergarten Math with Confidence is a complete kindergarten math curriculum that will give your child a solid foundation in math. It's **playful, hands-on, and fun** with thorough coverage of all the skills your child needs to become capable and confident at math:

- reading, writing, and comparing numbers
- beginning addition and subtraction
- shapes, patterns, and directions
- counting to 100
- money, time, and measurement

The carefully-sequenced and confidence-building lessons will help your child develop a strong understanding of math, step by step. Daily review will ensure she fully masters what she has learned in previous lessons. With this blend of **deep conceptual understanding** and **traditional skill practice**, your child will be well-prepared for first grade.

Parents who pilot-tested this book describe the lessons as fun, relationship-building, and even joyful! Your child will develop both strong number sense and a **positive attitude** toward math with activities like Subtraction War, Number Relay, and Pretend Store. You'll need just basic household items (like coins, objects to count, and a clock) to make math come alive for your child.

Kindergarten Math with Confidence also includes a **colorful, engaging workbook** to reinforce what your child has learned. (If your child's fine-motor skills are still developing, it's fine for you to scribe her answers in the workbook.) You'll also find weekly suggestions for delightful **math picture books**, as well as ways to incorporate what your child is learning into your everyday activities.

If you're like most parents, you've probably never taught math before. You may even feel a little anxious. But don't worry: if you can add $5 + 3$ and count to 100, I promise you'll be fine! *Kindergarten Math with Confidence* is full of features that will help you teach math with confidence all year long:

- **Scripted, open-and-go lessons** that guide you every step of the way
- Clear goals at the beginning of each lesson so that you know exactly what you're trying to accomplish
- Explanatory notes that help you understand more deeply how children learn math so that you feel well-equipped to teach your child
- Checkpoints at the end of each unit that give you specific guidance on whether to spend more time on the current unit or move on to the next one

In the next section, you'll learn how the curriculum is organized and how to get your materials ready. Invest a little time reading this section right now (and getting your Math Kit ready), and you'll be ready to teach math like a pro all year long.

Wishing you a joyful year of kindergarten math!

Kate Snow

How to Use This Book

Is My Child Ready to Start *Kindergarten Math with Confidence*?

Most children will be ready to start *Kindergarten Math with Confidence* when they are 5 or 6 years old. Your child does not need to have used a formal preschool math program before starting, although it's helpful if she has already learned to count to 10 and hold a pencil.

If your child is ever frustrated, resisting math lessons, or crying during math time, it's a clear sign that you should take a break from the current topic, do some easy review, and then try again in a few weeks. If your child shows these signs frequently, it likely means that this book is too challenging for her current maturity level, no matter how old she is. Every child's brain matures at a different rate, and you and your child will both find your math lessons much more satisfying when your child is developmentally ready to begin.

Using this book with a younger child

A few 4-year-olds may be ready to use *Kindergarten Math with Confidence*, but most young children won't be ready for the number-writing on the worksheets or the more abstract concepts in the program (such as categorizing shapes or writing two-digit numbers). If your younger child is interested in numbers, you can use *Preschool Math at Home* before starting this program. Then, monitor his level of engagement and frustration to decide whether or not he is mature enough for kindergarten math.

Using this book after *Preschool Math at Home*

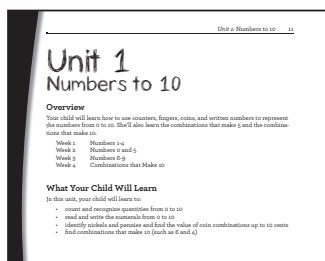
If you used *Preschool Math at Home* (or another preschool math program), you might find that the Unit 1 lessons are quite easy for your child. Do teach your child each lesson, but adjust the pace based on how quickly your child learns the new portions of each lesson. You may find that you can combine two lessons into one math session during Unit 1 because your child is already familiar with many of the concepts.

Overview

Kindergarten Math with Confidence is organized into units, weeks, and lessons with clear goals for each section so that you know exactly what you're trying to accomplish. At the end of the book, you'll also find an appendix of helpful resources, including the full scope and sequence, a list of recommended picture books, list of materials needed, and Blackline Masters.

Units

Kindergarten Math with Confidence is divided into 10 units. Each unit focuses on one core topic, such as shapes, addition, or counting to 100.

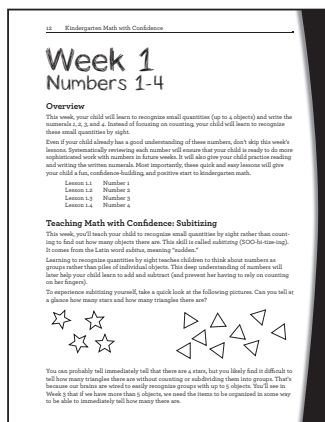


Sample Unit Overview

Weeks

Each unit is divided into 2–5 weeks, for a total of 32 weeks. Each week has a specific focus, such as putting numbers in order from least to greatest or understanding the concept of addition.

Although these groups of lessons are called weeks, that doesn't mean you have to finish each one in a calendar week—it's fine to have your "week" begin on Wednesday and end on the following Friday.



Sample Week Preview

The preview for each week includes the following:

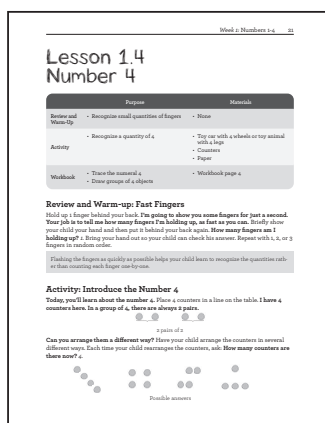
- **Overview.** A quick summary of what you'll teach your child that week, along with a list of the lessons.
- **Teaching Math with Confidence.** These notes will help you understand more deeply how children learn math so that you're well-prepared and confident as you teach your child the new concepts.
- **Household Materials Needed for the Week.** You'll sometimes need to supplement your regular math materials with a few everyday household items, such as stuffed animals, crayons, or plastic cups. This section will give you a heads-up if you need any extra materials for the week. (See below for more information on materials.)
- **Weaving Math Into Everyday Life.** These simple math applications will help you incorporate what your child is learning in math into everyday activities like eating a snack, going to the park, or running errands.

- **Math Book of the Week.** These math picture book recommendations align with what your child learns each week.

Note that Weaving Math into Everyday Life and the Math Book of the Week are completely optional. You do not need to hunt down every picture book or do every activity.

Lessons

Each week includes four lessons, which should be plenty for most kindergartners. It also gives your family a little extra room in the calendar for chores, errands, or appointments. (See below for options if you prefer to teach math 5 days per week.)



Sample lesson

Within the lessons:

- **Bold text** indicates what you are to say.
- *Italic text* provides sample answers.
- Gray-highlighted text indicates explanatory notes.

At the beginning of each lesson, you'll find the goals for each part of the lesson, as well as the materials you'll need. The lessons follow a consistent 3-part format:

Review and warm-up (3-5 minutes)

These brief activities practice key skills and review important concepts so that your child remembers and retains what she has learned. Try to keep these activities short and sweet so that your child isn't worn out before she gets to the main section of the lesson.

Hands-on activities (5-10 minutes)

These fun, playful, and informal activities are the core of each lesson. You'll use conversation, games, and everyday items to help your kindergartner develop a deep understanding of math.

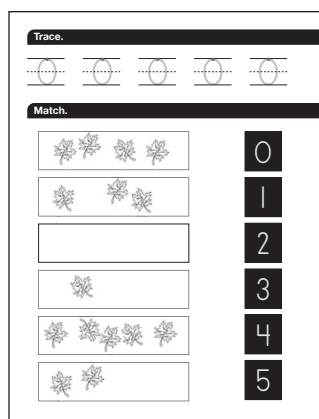
Don't be afraid to have fun and interject your own personality into the activities. They're scripted so that you can just open the book and start reading, but you're welcome to rephrase the words to fit your own teaching style better. Also feel free to personalize the lessons and tailor them to your child: you might use your child's favorite objects for counting, change the names in word problems to match your family members, or take your math lesson outside to enjoy a beautiful day.

Workbook (2-5 minutes)

Your child will complete a short workbook page at the end of each lesson. Most will take just a few minutes, but they will give your child important practice at writing numbers, following directions, and interpreting math in a written format.

Each workbook page has two parts:

- **Number tracing.** At the top of each page, your child will trace 5 numbers so that she learns to write numbers fluently. Learning how to write the numbers from 0 to 10 this year will make first-grade math much easier next year.
- **Practice or review.** At the bottom of each page, your child will either practice the new skills in the lesson or review previously-learned skills.



Sample workbook page

Kindergartners have a huge range of fine-motor abilities. If writing numbers is difficult for your child, feel free to adjust the writing activities to meet your child's needs better. One easy solution is to have him complete the bottom part of the worksheet orally rather than writing out the answers. If he finds tracing the numbers at the top of each page too difficult, have him trace the numbers with his finger instead. That way, he'll begin to learn the sequences of strokes that make up the written numbers and be better prepared to write the numbers once his fine-motor skills develop further.

Your child will be able to complete many of the workbook pages independently, but you'll often need to stay nearby to read the directions and help your child understand what to do on the page. After your child completes the workbook page, check it immediately to show you value the effort your child put into it and to catch any mistakes before they become habits.

Have your child use a pencil to complete the workbook pages so that it's easy to erase mistakes. You'll occasionally need crayons or colored pencils for the workbook. If that's the case, it will be noted in the materials list for the lesson.

Lesson Length

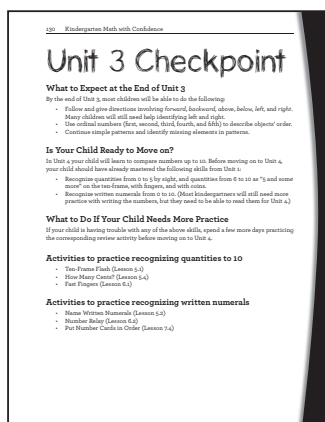
Most kindergartners have a short attention span. The lessons in this book are meant to take about 15 minutes with a variety of activities within each lesson to help keep your child engaged and on-task. You'll find that the Unit 1 lessons are especially short. This will help your child build her attention span during the first few weeks of the program.

If you find that a particular lesson is taking longer than 15 minutes or your child is getting restless, stop where you're at and resume the lesson the next day. Or, break the lesson into two parts: do the hands-on lesson during one part of the day, and then have your child do the workbook page at a different time of day.

Checkpoints

Each lesson gently builds on the previous one, but that doesn't mean that your child needs to fully master the skills from one lesson before moving on to the next. Most children will need lots of practice before they are proficient in each area, so this curriculum includes lots of opportunities for review and practice before your child is expected to achieve full mastery of any given skill.

As a general rule, continue teaching new lessons until you reach the end of a unit. At the end of the unit, you'll find a Checkpoint that will help you assess how your child is doing. The Checkpoints will also give you clear guidance on whether to move on to the next unit or give your child more practice with the current unit.



Each Checkpoint is divided into 3 parts:

- **What to Expect at the End of the Unit** This list of skills tells you what kindergartners are typically able to do at the end of each unit.
- **Is Your Child Ready to Move On?** This section tells you exactly what your child needs to have mastered before moving on to the next unit.
- **What to Do if Your Child Needs More Practice** If your child isn't quite ready to move on, this section gives you options for reviewing and practicing the essential skills that your child needs to master before the next unit. (This section is omitted if no specific skills are necessary for the next unit.)

Bear in mind that your child often does not need to have mastered all of the material from the current unit before moving on. For example, in Unit 1, your child will learn to recognize written numbers from 0 to 10. But your child does not need to master reading numbers before learning about shapes, patterns, and directions in Units 2 and 3. Instead, she'll continue to practice reading numbers throughout Units 2 and 3 so that she has them fully learned before beginning to compare numbers in Unit 4.

Scheduling Tips

The more consistently you teach math, the better your child will remember what she's learned—and the more you both will enjoy your math time together. Use these scheduling tips to make a plan that will help you teach math consistently all year long.

Yearly scheduling

Kindergarten Math with Confidence has a total of 32 weeks of lessons, with 4 lessons per week. You may want to pull out a calendar now and count how many weeks are in your academic year so that you don't have any unpleasant surprises at the end of the year.

If you find that you can't fit 32 weeks into your school year, one option is to teach 5 lessons per week so that you can fit in more of the lessons throughout the year. (If you teach 5 lessons every week, you'll only need 26 weeks to complete the curriculum.) Or, you might continue teaching into the summer so that you don't feel rushed and so your child has less time to forget math during the summer break.

Another option is to skip Unit 10 (which focuses on months, days of the week, and reading clocks) and incorporate some of the activities into your daily routine instead. Either way, do make sure to teach the final lesson in the book (Lesson 32.4), as it gives you and your child a chance to celebrate your child's progress and end the year on a positive note.

Weekly scheduling

In your weekly schedule, plan to teach math at least 4 days per week for about 15 minutes per day.

Each week includes a suggestion for a related picture book and real-life math application. This book and activity are perfect for the fifth day of the week if you'd like to do some math without teaching a full lesson. Or, you can add the picture book to your read-aloud time and look for another time in the week for the application activity. Either way, these extra activities are completely optional—you do not need to hunt down every picture book or do every activity.

Daily scheduling

To help you teach consistently, try to have a set time for teaching math each day. Many families find it best to do math first thing in the morning when everyone's fresh. If you have younger children, you might find that it works better to do math in the afternoon while your littler ones are napping (and are less likely to wander away with the pattern blocks).

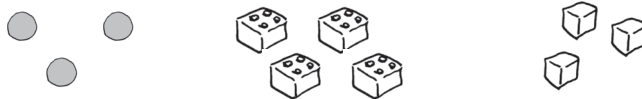
What You'll Need

You'll use simple household items to make math hands-on, concrete, and fun in *Kindergarten Math with Confidence*. You likely already own nearly everything you need (with the possible exception of pattern blocks—see below for details on how to buy these inexpensive blocks). Use the following guide to create a toolbox of math materials that you'll use in nearly every lesson.

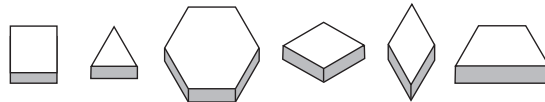
How to Create Your Math Kit

To create your Math Kit, stick the following materials in a box or basket and always keep them handy when you're teaching.

- **100 small counters.** Any type of small object (such as plastic tiles, Legos, blocks, plastic bears, coins, or dried beans) is fine. These will work best (and fit the Blackline Masters) if they are less than .75" (or 2 cm) across. You'll occasionally need 2 colors, so make sure at least 10 of the counters are a different color than the rest.



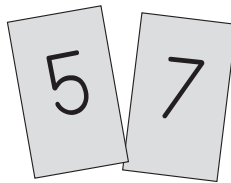
- **Pattern blocks.** Pattern blocks are a specific set of small plastic or wooden hexagons, triangles, squares, trapezoids, and diamonds. They're generally available for about \$10 online or at school supply stores. You can also photocopy and color Blackline Master 3 (pages 439-443) instead, although children usually find real blocks easier to maneuver.



- **Coins (20 pennies, 20 nickels, 10 dimes).** You can use toy coins, but children often enjoy using real coins more. If you live outside the U.S., see page 25 for options that you can use instead of American coins.



- **2 packs of 100 blank index cards.** You'll use index cards for many different activities, such as making Number Cards for games, covering parts of patterns, and creating a simple map for practicing left and right. Three-inch by five-inch blank cards are ideal, but anything similar will work.



- **Blank paper.** Any kind of paper is fine, including plain copy paper.
- **Pencils.** Keep sharp pencils on hand for occasional writing during the hands-on activities and for your child to use when completing the workbook pages.

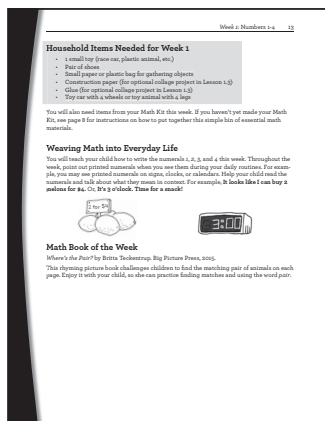
Some lessons will also call for you to use the Blackline Masters at the back of this book. You will use Blackline Masters 1, 4, 5, and 8 frequently, so you may want to laminate them or put them in plastic page protectors for durability.

You will occasionally make items that you will need to save for future lessons (such as Number Cards or a poster identifying left and right). **Bold text** will alert you if you need to save anything from the lessons.

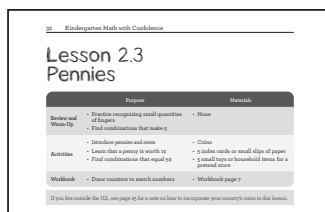
Other Supplies Needed

You'll only need your Math Kit to teach most lessons, but occasionally you'll need additional, common household items like stuffed animals, spoons, or shoes. You'll find these items listed in three different places in the curriculum to make sure you always know what you need:

- The preview for each week lists all extra household items needed that week.



- The top of each lesson lists all supplies you'll need to teach that lesson. These lists include items from your Math Kit as well as extra household items.



- You'll find the complete list of household items needed throughout the year on page 434.

Don't feel that you have to gather all these extra household items now. Most are common things like glue, scissors, or a stack of books that you can grab right before you begin the lesson.