## MASTERBOOKS CURRICULUM

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## Dedication

For all of the precious children, the ability to learn is a gift from God.

## Author Bio:

As a homeschooling mom and author, Angela O'Dell embraces many aspects of the Charlotte Mason method yet knows that modern children need an education that fits the needs of this generation. Based upon her foundational belief in a living God for a living education, she has worked to bring a curriculum that will reach deep into the heart of home-educated children and their families. She has written over 20 books, including her history series and her math series. Angela's goal is to bring materials that teach and train hearts and minds to find the answers for our generation in the never-changing truth of God and His Word.

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## Using This Course

Features: The suggested weekly schedule enclosed has easy-to-manage lessons that guide the reading, worksheets, and all assessments. The pages of this course are perforated and three-hole punched so materials are easy to tear out, hand out, grade, and store. Teachers are encouraged to adjust the schedule and materials needed in order to best work within their unique educational program.

Lesson Scheduling: "Quizzes" or reviews (whichever you want to use them as) are in the form of "letters to Mom and Dad." The twins want to show their parents what they have been learning on Grandpa and Grandma's farm, and they need your students to help them! Your students show what they have learned by writing the letters for the twins. The last 6 lessons are focused reviews, covering topics learned throughout the first 30 lessons.
$\left.\begin{array}{ll}\hline-2 & \begin{array}{l}\text { Approximately } 30 \text { minutes per lesson, five days a week, } \\ \text { for 36 weeks }\end{array} \\ \text { Answer keys for worksheets are available online: } \\ \text { www.masterbooks.com/classroom-aids }\end{array}\right\}$

## Course Description

This book was written to be used by you and your young student together. It is the story of a twin brother and sister who are visiting their grandparents' farm. They soon learn that the farm is full of learning opportunities! As you read their story, your student will be drawn into the adventure along with the twins. They will learn about numbers, shapes, place value, adding, and subtracting. They will also learn about gardening, baby animals on the farm, nature, and the love of family. They will hear exciting stories from Grandpa and Grandma, and they will be invited to join the twins on their living math adventures. I hope you have a grand time on this adventure. Below is an explanation of how this book is laid out. It is meant to be easy to use and something students will want to do every day. Have a wonderful time exploring and learning!

The first 30 lessons each have a story about the twins, followed by a lesson taught by Grandpa or Grandma through hands-on learning around the farm. Sometimes this lesson is learned by the twins' explorations in nature. After the story, there is a section for your students to practice the lesson they learned, and to review what they have learned earlier.

Note: You can supplement the worksheets in the Math for a Living Education series with additional worksheets, activities, and quizzes in Practice Makes Perfect, also available from Master Books.

## Course Objectives

Students completing this course will
$\checkmark$ Learn their numbers from 0 to 100
$\checkmark$ Review circles and patterns, counting and addition, days of the week, and telling time
$\checkmark$ Explore simple concepts and symbols used in mathematics, and simple fractions
$\checkmark$ Identify place values, number families, and solving for an unknown.

## How can mathematics be taught as a living subject?

Have you ever noticed that we tend to compartmentalize when teaching our children? In real life, there aren't artificial barriers between "subjects." For example, when you are cooking or baking, you have to use the skills of reading, logical thinking, and measuring, just to name a few. In driving a car, you see and read road signs, read maps, and count miles. So why do we say to our students, "This is math, this is language, this is science/nature, this is history. . ? ?"

I have learned that it is most natural and most effective to teach children, not subjects. For example, one conversation, which was originally about telling time, turned into a story about when I was a child and completely burned a batch of cookies because I didn't set a timer. Out came the timer, which was scrutinized closely by all within hearing. Out came the cookbook, which was carefully perused by two sisters, who decide they would like to make cookies and remember to set the timer. Little sister asked if she could help by measuring, and Mom said, "You know, guys, while you are making the cookies, I will play the audio book CD that we started last night!"

In this story, what if I had said, "NO, we are sticking to telling time, and we are going to drill about how to learn to tell time!" A wonderful chance to bring math to life would have slipped by. Even more sadly, the children would not have the chance to actually use the skill. They would have missed the opportunity to see how telling time is only part of the picture - they would have missed out on why telling time is important for them to learn, and how it can help them in everyday life.

I am not saying that there aren't times to stick to the topic on hand, and I most certainly am not saying that there isn't a time and place for drill. But drill cannot take the place of math in real life. One without the other is like love without discipline or discipline without love. We have to have balance! It has become quite clear to me that there is an abundance of math curriculums available that are nothing but monotonous drill sheets dressed up in pretty colors. Pretty colors do not make a living book. Content, story, and the ability to show math in real life make a living math book.

## Supply list for manipulatives

In the back of the book, you will find a manipulatives section. Before starting the book, gather these resources.
contact paper and construction paperlarge index cardsbrass fastenerscrayons, markers, and colored pencilsglue or pastehole punch and hole reinforcersrings to keep flashcards togethera plastic shoebox with lid in which to store manipulatives
(optional but helpful) stickers to use for flashcards
pictures from old magazinesposter board (several large pieces)at least 100 "counting items" (dried beans, buttons, and craft sticks all work well)
$\square 3$ containers for your Place Value Village (1 larger, 1 medium, 1 smaller)snack-size baggies, and one durable gallon-or quart-size freezer bag

## How to use everyday items as manipulatives

Contrary to popular opinion, you don't need fancy, expensive, special manipulatives to teach math concepts. What? As shocking as that is, I can personally attest that it is 100 percent true; I've been doing it for years. So how do you turn all those small items that hang around your house and fill your "junk drawer" into useful math manipulatives?

Well, let's start with my favorite, the trusty dried bean ${ }^{*}$ ! When you are teaching your students place value, dried beans just might become your new best friends. How? Follow these steps:

1. When your student is counting $0-9$, simply place single beans into the ONE'S house, and have your student write on their Place Value Village Mat, the numbers 0-9.
2. As we all know, only 9 ones can live in the ONE'S house, so all those 9 beans jump out of their house and join up with their new friend, Mr. Tenth bean! They all then jump into a snack size baggie (usable over and over) and go next door to live in the TEN'S house.
3. Repeat this process until you have ten baggies
of beans trying to live in the TEN'S house. Of course only nine can live there, so all the baggies of ten jump into a bigger bag (you will only need one of these this year) and make the move to their new house, the HUNDRED'S house. You can also use buttons, paper clips, or basically any small item. They don't even have to be all the same kind of item.
4. Place Value Village tutorial video: https://www. youtube.com/watch?v=fuZ7Y3fDe7c

* Dried kidney beans are the best for this, as they are very sturdy.


## Grading subjective assignments

Most often with math the grading is very objective. For example, $2+2=4$, and no amount of individual expression changes this answer. However, there are times in this course when the answer may depend on a student's reflections of what he or she has learned on a particular day or in a week of assignments. In these subjective cases, the teacher can base a grade for these responses on several more objective measures. Does the student seem to understand the question and answer it as clearly as possible? Does the answer seem complete or does it fail to answer all aspects of the question? So a student may receive full credit if they seemed to meet all the assignment requirements, may get a passing grade if they meet some of the requirements, or may need to repeat the assignment if they didn't meet any of the requirements.

A - Student showed complete mastery of concepts with no errors.
B - Student showed mastery of concepts with minimal errors.
C - Student showed partial mastery of concepts. Review of some concepts is needed.
D - Student showed minimal understanding of concepts. Review is needed.
F - Student did not show understanding of concepts. Review is needed.

First Semester Suggested Daily Schedule

| Date | Day | Assignment | Due Date | $\checkmark$ Grade |
| :---: | :---: | :---: | :---: | :---: |
| First Semester-First Quarter |  |  |  |  |
| Week 1 | Day 1 | Read Lesson 1• Pages 15-16 <br> Complete Lesson 1 Exercise 1 - Page 17 |  |  |
|  | Day 2 | Complete Lesson 1 Exercise 2 - Pages 18-19 |  |  |
|  | Day 3 | Complete Lesson 1 Exercise 3 - Page 20 |  |  |
|  | Day 4 | Complete Lesson 1 Exercise $4 \bullet$ Pages 21-22 |  |  |
|  | Day 5 | Complete Lesson 1 Exercise 5 Review Time • Pages 23-24 |  |  |
| Week 2 | Day 6 | Read Lesson 2• Pages 25-26 <br> Complete Lesson 2 Exercise 1 • Pages 27-28 |  |  |
|  | Day 7 | Complete Lesson 2 Exercise 2 • Pages 29-30 |  |  |
|  | Day 8 | Complete Lesson 2 Exercise 3- Pages 31-32 |  |  |
|  | Day 9 | Complete Lesson 2 Exercise $4 \cdot$ Pages 33-34 |  |  |
|  | Day 10 | Complete Lesson 2 Exercise 5 Review Time • Pages 35-36 |  |  |
| Week 3 | Day 11 | Read Lesson 3 • Pages 37-38 <br> Complete Lesson 3 Exercise 1 • Pages 39-40 |  |  |
|  | Day 12 | Complete Lesson 3 Exercise 2 • Pages 41-42 |  |  |
|  | Day 13 | Complete Lesson 3 Exercise 3 • Pages 43-44 |  |  |
|  | Day 14 | Complete Lesson 3 Exercise $4 \bullet$ Pages 45-46 |  |  |
|  | Day 15 | Complete Lesson 3 Exercise 5 Review Time • Pages 47-48 |  |  |
| Week 4 | Day 16 | Read Lesson $4 \bullet$ Pages 49-50 <br> Complete Lesson 4 Exercise 1 • Pages 51-52 |  |  |
|  | Day 17 | Complete Lesson 4 Exercise $2 \cdot$ Pages 53-54 |  |  |
|  | Day 18 | Complete Lesson 4 Exercise 3 - Pages 55-56 |  |  |
|  | Day 19 | Complete Lesson 4 Exercise $4 \bullet$ Pages 57-58 |  |  |
|  | Day 20 | Complete Lesson 4 Exercise 5 Review Time • Pages 59-60 |  |  |
| Week 5 | Day 21 | Read Lesson 5 - Pages 61-62 <br> Complete Lesson 5 Exercise 1 • Page 63 |  |  |
|  | Day 22 | Complete Lesson 5 Exercise 2 • Pages 64-65 |  |  |
|  | Day 23 | Complete Lesson 5 Exercise 3 - Page $66 \bullet$ Manipulatives $\bullet$ Page 335 |  |  |
|  | Day 24 | Complete Lesson 5 Exercise $4 \bullet$ Page 67 |  |  |
|  | Day 25 | Complete Lesson 5 Exercise 5 Review Time • Pages 68-72 |  |  |
| Week 6 | Day 26 | Read Lesson 6 • Pages 73-74 <br> Complete Lesson 6 Exercise 1 • Pages 75-76 |  |  |
|  | Day 27 | Complete Lesson 6 Exercise $2 \cdot$ Pages 77-78 |  |  |
|  | Day 28 | Complete Lesson 6 Exercise 3 • Pages 79-80 |  |  |
|  | Day 29 | Complete Lesson 6 Exercise 4 • Pages 81-83 |  |  |
|  | Day 30 | Complete Lesson 6 Exercise 5 Review Time - Page 84 |  |  |



| Week 4 | Day 61 | $\begin{aligned} & \text { Read Lesson } 13 \bullet \text { Pages 135-136 } \\ & \text { Complete Lesson } 13 \text { Exercise } 1 \bullet \text { Pages 137-138 } \\ & \hline \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Day 62 | Complete Lesson 13 Exercise 2 Page 139 |  |  |  |
|  | Day 63 | Complete Lesson 13 Exercise $3 \cdot$ Pages 140-141 |  |  |  |
|  | Day 64 | Complete Lesson 13 Exercise $4 \cdot$ Page 142 |  |  |  |
|  | Day 65 | Complete Lesson 13 Exercise 5 Review Time • Pages 143-144 |  |  |  |
| Week 5 | Day 66 | Read Lesson $14 \cdot$ Page 145 <br> Complete Lesson 14 Exercise 1 • Pages 146-147 <br> Manipulatives • Page 339 |  |  |  |
|  | Day 67 | Complete Lesson 14 Exercise 2• Page 148 |  |  |  |
|  | Day 68 | Complete Lesson 14 Exercise 3 - Page 149 |  |  |  |
|  | Day 69 | Complete Lesson 14 Exercise $4 \cdot$ Page 150 |  |  |  |
|  | Day 70 | Complete Lesson 14 Exercise 5 Review Time • Pages 151-152 |  |  |  |
| Week 6 | Day 71 | Read Lesson 15 • Pages 153-154 <br> Complete Lesson 15 Exercise 1 - Page 155 <br> Manipulatives • Page 344 |  |  |  |
|  | Day 72 | Complete Lesson 15 Exercise 2 - Page 156 |  |  |  |
|  | Day 73 | Complete Lesson 15 Exercise 3 - Page 157 |  |  |  |
|  | Day 74 | Complete Lesson 15 Exercise 4• Page 158 |  |  |  |
|  | Day 75 | Complete Lesson 15 Exercise 5 Review Time • Page 159-160 |  |  |  |
| Week 7 | Day 76 | Read Lesson 16• Pages 161-162 <br> Complete Lesson 16 Exercise 1 • Page 163-164 |  |  |  |
|  | Day 77 | Complete Lesson 16 Exercise 2 - Page 165 |  |  |  |
|  | Day 78 | Complete Lesson 16 Exercise 3 - Page 166 |  |  |  |
|  | Day 79 | Complete Lesson 16 Exercise $4 \cdot$ Page 167 |  |  |  |
|  | Day 80 | Complete Lesson 16 Exercise 5 Review Time - Page 168 |  |  |  |
| Week 8 | Day 81 | Read Lesson 17 • Pages 169-172 <br> Complete Lesson 17 Exercise 1 - Page 173 |  |  |  |
|  | Day 82 | Complete Lesson 17 Exercise • Page 174 |  |  |  |
|  | Day 83 | Complete Lesson 17 Exercise 3 - Pages 175-176 |  |  |  |
|  | Day 84 | Complete Lesson 17 Exercise 4• Page 177 |  |  |  |
|  | Day 85 | Complete Lesson 17 Exercise 5 Review Time - Page 178 |  |  |  |
| Week 9 | Day 86 | Read Lesson $18 \cdot$ Pages 179-180 <br> Complete Lesson 18 Exercise 1 - Page 181 |  |  |  |
|  | Day 87 | Complete Lesson 18 Exercise 2 - Page 182 |  |  |  |
|  | Day 88 | Complete Lesson 18 Exercise 3 - Page 183 |  |  |  |
|  | Day 89 | Complete Lesson 18 Exercise 4• Page 184 |  |  |  |
|  | Day 90 | Complete Lesson 18 Exercise 5 Review Time • Pages 185-186 Appendix • Page 343 |  |  |  |
|  |  | Mid-Term Grade |  |  |  |

Second Semester Suggested Daily Schedule

| Date | Day | Assignment | Due Date | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Second Semester-Third Quarter |  |  |  |  |
| Week 1 | Day 91 | Read Lesson 19 • Pages 187-188 <br> Complete Lesson 19 Exercise 1 - Page 189 |  |  |
|  | Day 92 | Complete Lesson 19 Exercise 2 - Page 190 |  |  |
|  | Day 93 | Complete Lesson 19 Exercise 3 - Page 191 |  |  |
|  | Day 94 | Complete Lesson 19 Exercise 4• Page 192 |  |  |
|  | Day 95 | Complete Lesson 19 Exercise 5 Review Time • Pages 193-194 |  |  |
| Week 2 | Day 96 | Read Lesson 20 - Page 195 <br> Complete Lesson 20 Exercise 1 • Page 196 |  |  |
|  | Day 97 | Complete Lesson 20 Exercise 2 • Page 197 |  |  |
|  | Day 98 | Complete Lesson 20 Exercise 3 • Page 198 |  |  |
|  | Day 99 | Complete Lesson 20 Exercise $4 \cdot$ Page 199 |  |  |
|  | Day 100 | Complete Lesson 20 Exercise 5 Review Time - Page 200 |  |  |
| Week 3 | Day 101 | Read Lesson 21 - Page 201 <br> Complete Lesson 21 Exercise 1 • Page 202 |  |  |
|  | Day 102 | Complete Lesson 21 Exercise 2 • Page 203 |  |  |
|  | Day 103 | Complete Lesson 21 Exercise 3 • Page 204 |  |  |
|  | Day 104 | Complete Lesson 21 Exercise 4 • Page 205 |  |  |
|  | Day 105 | Complete Lesson 21 Exercise 5 Review Time • Page 206 |  |  |
| Week 4 | Day 106 | Read Lesson 22 • Pages 207-208 <br> Complete Lesson 22 Exercise 1 - Page 209 |  |  |
|  | Day 107 | Complete Lesson 22 Exercise 2 • Page 210 |  |  |
|  | Day 108 | Complete Lesson 22 Exercise 3 - Page 211 |  |  |
|  | Day 109 | Complete Lesson 22 Exercise $4 \cdot$ Page 212 |  |  |
|  | Day 110 | Complete Lesson 22 Exercise 5 Review Time • Pages 213-214 |  |  |
| Week 5 | Day 111 | Read Lesson 23 • Pages 215-216 <br> Complete Lesson 23 Exercise 1 - Page 217 |  |  |
|  | Day 112 | Complete Lesson 23 Exercise 2 • Page 218 |  |  |
|  | Day 113 | Complete Lesson 23 Exercise 3 - Page 219 |  |  |
|  | Day 114 | Complete Lesson 23 Exercise $4 \cdot$ Page 220 |  |  |
|  | Day 115 | Complete Lesson 23 Exercise 5 Review Time • Pages 221-222 |  |  |
| Week 6 | Day 116 | Read Lesson 24 • Pages 223-224 <br> Complete Lesson 24 Exercise 1 - Page 225 <br> Appendix • Page 341 |  |  |
|  | Day 117 | Complete Lesson 24 Exercise 2• Page 226 |  |  |
|  | Day 118 | Complete Lesson 24 Exercise 3 - Page 227 |  |  |
|  | Day 119 | Complete Lesson 24 Exercise $4 \cdot$ Page 228 |  |  |
|  | Day 120 | Complete Lesson 24 Exercise 5 Review Time • Pages 229-230 |  |  |


| Date | Day | Assignment | Due Date | $\checkmark$ | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Week 7 | Day 121 | Read Lesson 25 • Pages 231-232 <br> Complete Lesson 25 Exercise 1 • Pages 233-234 |  |  |  |
|  | Day 122 | Complete Lesson 25 Exercise 2 - Page 235 |  |  |  |
|  | Day 123 | Complete Lesson 25 Exercise 3 - Pages 236-237 |  |  |  |
|  | Day 124 | Complete Lesson 25 Exercise $4 \cdot$ Page 238 |  |  |  |
|  | Day 125 | Complete Lesson 25 Exercise 5 Review Time • Pages 239-240 |  |  |  |
| Week 8 | Day 126 | Read Lesson 26 • Pages 241-242 <br> Complete Lesson 26 Exercise $1 \cdot$ Page 243 |  |  |  |
|  | Day 127 | Complete Lesson 26 Exercise 2 - Page 244 |  |  |  |
|  | Day 128 | Complete Lesson 26 Exercise 3 • Pages 245-246 |  |  |  |
|  | Day 129 | Complete Lesson 26 Exercise $4 \bullet$ Pages 247-248 |  |  |  |
|  | Day 130 | Complete Lesson 26 Exercise 5 Review Time • Pages 249-250 |  |  |  |
| Week 9 | Day 131 | Read Lesson 27 • Page 251 <br> Complete Lesson 27 Exercise 1 • Pages 252-253 |  |  |  |
|  | Day 132 | Complete Lesson 27 Exercise 2 - Page 254 |  |  |  |
|  | Day 133 | Complete Lesson 27 Exercise 3 - Page 255 |  |  |  |
|  | Day 134 | Complete Lesson 27 Exercise 4 - Page 256 |  |  |  |
|  | Day 135 | Complete Lesson 27 Exercise 5 Review Time • Pages 257-258 |  |  |  |
| Second Semester-Fourth Quarter |  |  |  |  |  |
| Week 1 | Day 136 | Read Lesson 28 • Page 259 <br> Complete Lesson 28 Exercise 1 • Pages 260-261 |  |  |  |
|  | Day 137 | Complete Lesson 28 Exercise 2 - Page 262 |  |  |  |
|  | Day 138 | Complete Lesson 28 Exercise 3 • Pages 263-264 |  |  |  |
|  | Day 139 | Complete Lesson 28 Exercise 4 • Page 265 |  |  |  |
|  | Day 140 | Complete Lesson 28 Exercise 5 Review Time • Page 266 |  |  |  |
| Week 2 | Day 141 | Read Lesson 29• Pages 267-268 <br> Complete Lesson 29 Exercise 1 - Page 269 |  |  |  |
|  | Day 142 | Complete Lesson 29 Exercise 2 • Page 270 |  |  |  |
|  | Day 143 | Complete Lesson 29 Exercise 3 - Pages 271-272 |  |  |  |
|  | Day 144 | Complete Lesson 29 Exercise $4 \cdot$ Page 273 |  |  |  |
|  | Day 145 | Complete Lesson 29 Exercise 5 Review Time • Page 274 |  |  |  |
| Week 3 | Day 146 | $\begin{array}{\|l\|} \hline \text { Read Lesson } 30 \bullet \text { Pages } 275-276 \\ \text { Complete Lesson } 30 \text { Exercise } 1 \bullet \text { Page } 277 \\ \hline \end{array}$ |  |  |  |
|  | Day 147 | Complete Lesson 30 Exercise 2 - Page 278 |  |  |  |
|  | Day 148 | Complete Lesson 30 Exercise 3 - Page 279 |  |  |  |
|  | Day 149 | Complete Lesson 30 Exercise $4 \bullet$ Page 280 |  |  |  |
|  | Day 150 | Complete Lesson 30 Exercise 5 Review Time • Pages 281-282 |  |  |  |
| Week 4 | Day 151 | Read Lesson 31 • Page 283 <br> Complete Lesson 31 Exercise 1• Pages 284-285 |  |  |  |
|  | Day 152 | Complete Lesson 31 Exercise 2 • Pages 286-287 |  |  |  |
|  | Day 153 | Complete Lesson 31 Exercise 3 • Pages 288-289 |  |  |  |
|  | Day 154 | Complete Lesson 31 Exercise $4 \bullet$ Pages 290-291 |  |  |  |
|  | Day 155 | Complete Lesson 31 Exercise 5 Review Time • Page 292 |  |  |  |


| Date | Day | Assignment | Due Date | $\checkmark$ | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Week 5 | Day 156 | Read Lesson 32 • Page 293 <br> Complete Lesson 32 Exercise 1• Page 294 |  |  |  |
|  | Day 157 | Complete Lesson 32 Exercise 2 - Page 295 |  |  |  |
|  | Day 158 | Complete Lesson 32 Exercise 3 - Page 296 |  |  |  |
|  | Day 159 | Complete Lesson 32 Exercise 4 - Page 297 |  |  |  |
|  | Day 160 | Complete Lesson 32 Exercise 5 Review Time • Page 298 |  |  |  |
| Week 6 | Day 161 | Read Lesson 33 • Page 299 <br> Complete Lesson 33 Exercise 1 • Page 300 |  |  |  |
|  | Day 162 | Complete Lesson 33 Exercise 2 • Page 301 |  |  |  |
|  | Day 163 | Complete Lesson 33 Exercise 3 • Page 302 |  |  |  |
|  | Day 164 | Complete Lesson 33 Exercise 4 • Page 303 |  |  |  |
|  | Day 165 | Complete Lesson 33 Exercise 5 Review Time • Page 304 |  |  |  |
| Week 7 | Day 166 | Read Lesson $34 \bullet$ Page 305 <br> Complete Lesson 34 Exercise 1 • Page 306 |  |  |  |
|  | Day 167 | Complete Lesson 34 Exercise 2 - Page 307 |  |  |  |
|  | Day 168 | Complete Lesson 34 Exercise 3 - Page 308 |  |  |  |
|  | Day 169 | Complete Lesson 34 Exercise 4-5 Pages 309-310 |  |  |  |
|  | Day 170 | Number Hunt! Have the student find examples of items that number from 1 to 20 in your classroom or home. |  |  |  |
| Week 8 | Day 171 | Read Lesson 35 • Page 311 <br> Complete Lesson 35 Exercise 1 - Page 312 |  |  |  |
|  | Day 172 | Complete Lesson 35 Exercise 2 • Pages 313-314 |  |  |  |
|  | Day 173 | Complete Lesson 35 Exercise 3 - Page 315 |  |  |  |
|  | Day 174 | Complete Lesson 35 Exercise $4 \cdot$ Page 316 |  |  |  |
|  | Day 175 | Complete Lesson 35 Exercise 5 Review Time • Pages 317-318 |  |  |  |
| Week 9 | Day 176 | Read Lesson 36 • Page 319 <br> Complete Lesson 36 Exercise 1 • Page 320 |  |  |  |
|  | Day 177 | Complete Lesson 36 Exercise 2 • Page 321 |  |  |  |
|  | Day 178 | Complete Lesson 36 Exercise 3 - Page 322 |  |  |  |
|  | Day 179 | Complete Lesson 36 Exercise $4 \cdot$ Page 323 |  |  |  |
|  | Day 180 | Complete Lesson 36 Exercise 5 P Page 324 |  |  |  |
|  |  | Final Grade |  |  |  |



## The Adventure Begins! We Learn Numbers 0-9



Welcome to a wonderful adventure! We are going to have so much fun learning together this year. Do you know that there are numbers, patterns, and shapes all around us? This is the story of Charlie and Charlotte. They are brother and sister twins, who have come to spend the summer at their grandparents' farm. This is Charlie and Charlotte and their pet turtle, Pokey.
When they arrived at the farm this morning, the twins were a little sad to see their Mom and Dad leave, but they knew they would talk with them soon via videocall. Grandpa and Grandma were so excited to have them here on their farm! They told them about all of the new baby animals that were born this spring. The children can't wait to visit the barn and see all of them. Grandpa said they can go right after lunch, and then they are going to help him in the smaller of the two gardens.

The farm was beautiful! With the big red barn and white farmhouse, it looked like a picture in a storybook. Grandma's flowers nodded their heads at them as if they were saying, "Hello!" Pokey seemed to feel right at home, because he started eating grass and exploring Grandma's rock garden.


Grandpa and Grandma are very organized, and their farm is very orderly. The twins noticed that Grandpa used numbers to organize almost everything on his farm. From the stalls in the barn to the rows of vegetables in the garden, everything had numbers. The twins thought this
 was interesting, so they asked Grandpa why he did this. Grandpa chuckled and said, "I organize my animals in the barn and my vegetables in the kitchen garden by using numbers because it helps me to be more productive. I often use the numbers that I'm sure you two already have seen...look, here are the numbers or numerals, $0,1,2,3,4,5,6,7,8$, and 9 ."

The twins looked at each other and nodded, "Yes, Grandpa, Mom taught us those numbers already. We know that the number 0 means nothing. Is that why you have it on this row - because nothing is planted here?" Grandpa nodded and smiled.
"Yes, I left that row empty - with 0 plants - because I thought you two would like to plant something there." The twins nodded and smiled. They would indeed like to plant something in Grandpa's garden!

Grandpa walked to the next row and said, "There are nine more rows of vegetables in my garden. Row 1 has only 1 plant in it! Look, this is a giant pumpkin, and it will take all the room up all by itself! Next, we have row 2 . Row 2 has 2 plants in it." Grandpa held up two fingers to show what two looks like. "These two plants are zucchini plants. They also need a lot of room, because they grow really long vines. Row 3 has three sweet potato plants in it, and row 4 has 4 tomato plants inside these funny, round cages. Row 5 has 5 green bean plants, row 6 has 6 sugar snap plants growing on a fence, row 7 has 7 beets, row 8 has 8 corn plants, and row 9 has 9 carrot plants. Do you understand now?" They both nodded.

Later that evening, Charlie and Charlotte knelt by the coffee table while Grandma read a bedtime story. They wanted to practice writing the numbers or numerals Grandpa had shown them earlier. Why don't you practice too?

Trace the numbers below.


Remember, each of the numbers stands for a certain amount of something. Trace the numbers again, copy them on the lines below, then draw that many dots next to each number. Number 5 is done for you.



Let's try something new! Charlie and Charlotte discovered numbers in their Grandpa's garden and barn. See if you can discover numbers around your house. Draw pictures of what you find next to the correct number below. Count the objects you drew to make sure you have the right amount.
$\qquad$
On the next page, trace the numbers and match them to the group of turtles showing the correct amount. Number 1 is done for you.
(Remember! "0" means "nothing.")


How old are you? Write the number that shows your age. $\qquad$
How many fingers do you have on each hand? $\qquad$
How many eyes do you have? $\qquad$
How many legs do you have? $\qquad$

Here are the numbers you have learned so far. Trace them with your finger as you say them out loud. Then practice writing the numbers you have learned. Say them as you write them.


The next morning, after breakfast, Charlie and Charlotte ran to the barn to visit the baby animals. It was a beautiful sunny day, with a sky the color of a robin egg.
"Charlie, let's practice counting the baby animals!" Charlotte said excitedly.
"Okay, Charlotte, let's start with the baby pigs! Grandpa said that baby pigs are called piglets. Aren't they cute?" Charlie answered. The twins knelt to look through the gate.

How many piglets does this mommy pig have? $\qquad$


Next they counted the puppies.
How many puppies did the farm dog have this spring? $\qquad$


Now it's your turn! Write the number showing how many babies of each kind of animal was born on the farm. The first one is done for you.

There are $\underline{6}$ baby chickens (chicks).


There are $\qquad$ baby cats (kittens).


There are $\qquad$ baby goats (kids).


There are $\qquad$ baby rabbits (bunnies).


There is $\qquad$ baby horse (foal).


There are $\qquad$ baby cows (calves).


There are $\qquad$ baby ducks (ducklings).


There are $\qquad$ baby sheep (lambs).


## Review Time!

Help the twins write their letter.
After an exciting morning of playing with the baby farm animals and helping Grandpa in the barn, the twins ate a picnic lunch of peanut butter and strawberry jam sandwiches made with Grandma's fresh homemade bread. Delicious! "Why don't you two go in and sit down at the kitchen table and write your parents a letter?" Grandma said, "I'm sure they would love to hear all about your visit so far."
"Yes, that sounds like fun!" the children said excitedly.

## Dear Mom and Dad,

We are having so much fun with Grandpa and Grandma! Grandpa showed us these numbers! (You can look back in your lesson if you need to!)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ ,
, $\qquad$ , $\qquad$ ,

And this is what they mean! (Match them.)


We love you!
P.S. Did you know there are numbers all around us?

## Introducing the + and = Symbols



Over the course of this week, have the student orally narrate everything they have learned this week. Let them use their pictures of the patterns in nature as they show what they have learned.
Supply them with multiple small items, their Place Value Village, and their 100's chart. Have the student show others in the class or their family what they have learned about counting items using the terms " $10 s$ " and " $1 s$."
Have the student show others in the class or their family the pattern of 10 s on the 100's chart.

One lazy morning, the children were playing on the rope swing, which hung from the barn rafters. As Charlie gave his sister a push, Grandpa called from the stall at the other end of the barn, "Children, quick! Come and see! Betsy has had her babies!" With a squeal, the twins abandoned the swing and ran to where Grandpa was kneeling in the straw.
"Grandpa! Can we see? Can we see?" the twins chimed together. Betsy was the mama sheep whom the twins had been caring for since their arrival. She had gotten bigger and bigger as the lambs inside of her had grown. Grandpa had told them that Betsy had had two babies the year before also . . . twins! He had promised Charlie and Charlotte that they could have these two babies.

As the twins bent down, they saw the most darling lambs! They were so tiny! "When were they born, Grandpa?" Charlotte asked as she stroked the babies' heads. Grandpa sat back on his heels as he patted Betsy on the head.

"They must have been born last night, Charlotte. It must have been during that storm we had, because I would have heard otherwise. You two take these babies and sit over there. I need to make sure everything is okay with Betsy."

The twins carefully picked up the babies and moved a few feet away, so Grandpa could check Betsy over. "She looks fine! Thank goodness! I like to be with the sheep when they have their young ones. She just looks tired. Bring her babies back over now, so they can nurse and sleep." Grandpa took the babies from the children and carefully placed them back by Betsy. "This one is a girl . . . and let's see what this one is . . . a boy! We have a boy and a girl just like you two!" Grandpa smiled at the children's happy expressions. "Betsy is a good mama! These two babies plus the other babies she had last year. . . ." Grandpa counted on his fingers, "that makes four babies in all. Children, let's go tell Grandma about this. A little later, I will show you how I figured out how many babies Betsy has had."

Grandma was happy to hear about Betsy's babies. She smiled at the children's excitement as she placed the plates on the table for lunch. "You know, children, Betsy had two babies last year too!" The children nodded. "Why don't you two go wash your hands and get ready for lunch now," Grandma told the children. As they sat down to their lunch, the children were practically bouncing in excitement. It's not every day that you get to hold a lamb!
Grandpa smiled as they chattered about the babies in the barn, "Children, I want to show you how to add. That means putting more than one set of items together and then counting all of the items together."

Like this:


There are two circles in each set. If we count them together, we have 4 circles all together. We use these symbols when we are writing this on paper:

$$
+ \text { and }
$$



So we would write 2 and 2 is 4 like this:

$$
2+2=4
$$

Trace the symbols below:

$+$
means "and." When you see this symbol, you know you are going to be adding sets of items together.
_ means "the same as" or "equal." When you see this symbol, you know that the number or sets on both sides are exactly the same.

Trace these addition "problems."


Practice adding these sets. Write the number of items in each set, then write the answer.

$+$

$+$
=

Numbers for copywork:

$$
30 \quad 31 \quad 3233 \quad 34
$$

35
36
37
38
39

Draw pictures to solve these addition problems.


Have your student use the Place Value Village and Place Value Village Counting Mat to practice counting items up to 50. Have them narrate to you what they are doing.

Numbers for copywork:
4

44

## 45 <br> 46 <br> 47 <br> 48 <br> 49

Take out the "My Addition Mat" in the manipulative section of this book and the $0-20$ number cards. From the $0-8$ cards, choose 2 number cards at a time to make your own addition problems. Use beans, buttons, or some other small objects to solve your problems. As you work, tell your teacher what you are doing and why. Study the example.

My addition mat:


Using all the shapes you have learned, draw and color a pattern.
My pattern:

## Review Time!

Help the twins show their parents what they have learned.

## Dear Mom and Dad,

Guess what? Betsy had her lambs! Grandpa gave them to us as pets. May we please bring them home with us? Please! Please! Grandpa also taught us about addition. Look what we can do. (Use your Addition Mat)

$$
\begin{array}{ll}
2+3= & 5+2= \\
4+2= & 1+7=
\end{array}
$$

We can also write these numbers now. (Write the number you say when you count the 10s. You may look at your 100's chart if you need to.)
$\qquad$

$\qquad$
$\qquad$
$\qquad$

Last week, Grandpa taught us more about patterns in nature! This is our favorite! (Choose your favorite and draw it for the twins' parents.)
$\square$
Love,
Charlie, Charlotte, and our friend,

## Telling Time, Part 1

"Ding!" The kitchen timer was notifying Grandma that her biscuits were finished. Grabbing a hot pad, she deftly removed the pan from the oven, and slid the biscuits onto the cooling rack. The children watched as she flicked open a clean, white dishcloth and covered the biscuits with it. "Why do you do that, Grandma?" Charlotte inquired. "Why do the biscuits need to be covered?" "I want to make sure there are no nasty flies walking all over them, that's why," Grandma replied. She despised the flies at this time of year. It seemed like they came in through the walls. "Oh, what pests!" she would exclaim while stalking around brandishing the fly swatter like a deadly weapon.

The children looked at each other and smiled. Grandma always got the funniest look on her face when she talked about the flies. "I'm starving! What time is supper, anyway?" Charlie asked.
"Dinner will be ready in about 50 minutes, children. Meanwhile, why don't you two go wash up your hands and faces. You have just enough time to color a picture or play some tic-tac-toe before setting the table. We don't want the plates on the table too early, you know! Those filthy flies. . . " The children glanced at each other; the flies again. They ran to wash their hands.

"Grandma, how long is 50 minutes? Is it an hour? Is it more than an hour?" Charlotte stared at the big kitchen clock hanging above the stove. It was always a mystery to her how her grandparents could glance at it for just a second and say what time it was! "Can you show Charlie and me how to tell time like that?" Charlotte had begged Grandma on more than one occasion.

Grandma wiped her hands on her apron and sat down next to her grandchildren. "Do you two know how many minutes are in one hour?" she asked them. When they shook their heads, she took a piece of their paper and an orange crayon. "There are 60 minutes in one hour. Here, children, take a look at this. It is very important to learn to tell time in stages." Grandma drew a circle with the orange crayon. "Let's pretend that this circle is the face of the kitchen clock, okay?" The children nodded their heads together.
"As you can see, the clock has numbers on it. The number 12 is at the very top; then the other numbers go like this." Grandma quickly wrote the numbers $1-11$ around the rest of the clock. "Do you see how there are little marks between the numbers? Look closely." The twins squinted as they looked at the clock. Yes! They did see the little marks. "Those little marks are minutes. So, there are 5 minutes between each of the big numbers. Remember how Grandpa has been teaching you to count by 5 s? Well, that's how you count the minutes on a clock. So let's count the minutes together. Starting at the top, we go to the right. Every number stands for 5 minutes. Like this:

"By counting by 5 s , we can see that there are 60 minutes in an hour."

Now you try it! We have learned how to count to 50 by 5 s. Fill in those numbers on the clock. Some of them are done for you.


This is the first step in learning how to tell time! Remember, when counting minutes, always start at the top and move to the right.

Numbers to write. Write the numbers you say when you count by 5 s from 0-50. Find them on the 100's chart.

Addition practice. Using your Addition Mat (horizontal), number cards $0-10$, and small counting items, make up 5 addition equations. Narrate to your teacher what you are doing.
Make 2 new flashcards with these 2 addition facts:

$$
3+4=7 \text { and } 4+5=9
$$

Today you will assemble your own clock. You will find it in the back of this book on page 341 . Follow the directions carefully!
Now use your clock to practice counting minutes by 5 s.

Make tally marks for each set of pictures.


## 



Using your flashcards, practice your math facts.
$\qquad$

Practice counting by 5 s using your clock. Fill in the hours on this clock face.


Practice counting the minutes on the clock you assembled yesterday.
Numbers for copywork. Say the numbers as you write them. Find them on your 100's Chart.

## 7071727374

## 75 <br> 76 <br> 77 <br> 78 <br> 79

Using your flashcards, practice your math facts.

Practice counting the minutes on your clock. Narrate to your teacher what you are doing. Remember there are 60 minutes in an hour.


Using your Place Value Village, count out 60 items. Narrate to your teacher what you are doing.
How many 10s? $\qquad$ How many 1s? $\qquad$
Numbers to write. Write the numbers from 50-59 from memory. Find them on your 100's chart.

Practice your math facts, using your flashcards. Get ready for a show and tell!

## Review Time!

Show and tell time! Use this page to show your family or class what you have learned! Count the minutes out loud.


Count by $5 s$ from $0-50$. Write the numbers here.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Using 4 colors of construction paper ( 1 for each shape) cut out 2 circles, 2 squares, 2 rectangles, and 2 triangles. Make a pattern. Narrate what kind of pattern you made. Have fun!

Challenge your family or class to a tally mark scavenger hunt. Help your teacher write tally marks $1-10$ on 10 separate index cards. Lay the cards face-up on the table in order. Put out sets of items of your choice (1-10) and set a timer for 3 minutes. See if they can find items to match each card. You be the judge! Did they get the right amount of items for each set of tally marks?

Challenge your family or class to a math fact quiz! Use your flashcards and read the equation out loud but do not tell them the answer! The one who gets the answers the fastest is the winner. Choose a prize for them!
Good job!

## Review of Numbers to 100

We have reached the last lesson of our book! I hope you have had a wonderful time learning about mathematics this year. In our final lesson we are going to review numbers from $0-100$. You are going to be writing sections of numbers every day, and by the end of the week, you will have written all of the numbers $0-100$ !


Write the numbers $0-20$ from memory. When you are finished, check your numbers with your 100's Chart.

Say the numbers out loud.

# Write the numbers 21-40 from memory. When you are finished, check your numbers with your 100's Chart. 

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Say the numbers out loud.

Write the numbers 41-60 from memory. When you are finished, check your numbers with your 100's Chart.

Say the numbers out loud.

Write the numbers 61-80 from memory. When you are finished, check your numbers with your 100's Chart.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Say the numbers out loud.

Write the numbers $81-100$ from memory. When you are finished, check your numbers with your 100's Chart.

Say the numbers out loud.

> The End

$324 \quad \overline{M a t h ~ L e v e l ~} 1$ - Lesson 36

