

5th Grade Mathematics

5th Grade Mathematics continues building a solid foundation of arithmetic knowledge.

Throughout the course of the academic year, 5th grade students will focus on honing previously learned skills and acquiring new skills. Honing previous skills comes through working with what we call "Practical Problems." New skills, specifically work with decimals, will involve a wide variety of applications. Students will find these problems in the Mastery Practice section of the Daily Schedule.

In the Written Work portion of the day, we begin with #91. The teacher should note that each number represents an exercise, but also many times contains instruction. For example, #91 says, "A statement that two quantities are equal is called an Equation..." and then an example is given. Further, #91 asks the student to write an equation using three numbers. Number 92 defines Addends, and so on. Each exercise is an opportunity for students to either learn new concepts and skills or hone previously learned concepts and skills.

Students may, at times, feel they have done all this before. In these moments, remind the student that complexity of the thought processes continues even though the basic operation may be the same. If necessary, help them reflect on how much they knew in 1st grade versus how much they know now.

Students may become frustrated that answers are not readily available. They may wonder why they are asked to define words that have not been previously defined for them in the lesson. The lessons are designed to help students discover the "why" of what they are doing and then have a name to call what they are doing. This is the science of mathematics.

Course Organization:

- We recommend that students have a binder with dividers for different sections. Loose leaf paper can then be utilized for written work and filed in a Written Work section. Here are some suggested binder sections:
 - Mastery Practice
 - Definitions
 - Written work
 - Explore More

Explanation of Daily Schedule:

- Mastery Practice:
 - Mastery practice can be used by teachers in a variety of ways. Some teachers may choose to give these tasks in a speed test sort of fashion, but others may choose to simply have students put these items on flashcards for practice and review. Either way, these are items or processes that students should commit to memory and practice frequently.
- Written work:
 - Students should complete their written work in a notebook or binder of some sort.
- Define:
 - This area includes concepts from the text or related materials that students should commit to memory and frequently review. In addition to defining them on paper, we recommend that students also put these words on note cards to review with their Mastery Practice work.
- Notes:
 - These notes are for the teacher to aid in teaching the student.
- Explore More:
 - These projects help students apply a concept or learn more about a concept.

5th Grade Mathematics assumes students have acquired previous skills and allows for the review of those skills, especially with the Practical Problems. If parents need access to any of the previous texts used in the Wittenberg Academy Grammar School Mathematics series so as to review, please email mrsbenson@wittenbergacademy.org

Here is a link to the text: [5th Grade Mathematics](#)

Here is a link to the answer key: [5th Grade Mathematics Key](#)



Week 1

Topics:



- Equation
- Addend
- Sum
- Minuend
- Subtrahend
- Difference

Textbook reference and written work:

- 5th Grade Mathematics p. 1-2
- 5th Grade Mathematics p. 102-104

Suggested Daily Schedule:

Day 1:

- Mastery Practice: 5th Grade Mathematics p. 1
- Written Work: 5th Grade Mathematics p. 102 #91-96
- Define: Equation, Addend, Sum

Day 2:

- Mastery Practice: 5th Grade Mathematics p. 2
- Written Work: 5th Grade Mathematics p. 103 #97-104

Day 3:

- Written Work: 5th Grade Mathematics p. 103-104 #105-115
- Define: Minuend, Subtrahend, Difference

Week 2



Words to remember:

- Multiplicand
- Multiplier
- Product
- Dividend
- Divisor
- Quotient

Textbook reference and written work:

- 5th Grade Mathematics p. 3-4
- 5th Grade Mathematics p. 104-106

Suggested Daily Schedule:

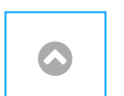
- Day 1:
 - Practical Problems: p. 3
 - Integers and Decimals: p. 104-105 #116-122
 - Define: Multiplicand, Multiplier, Product
- Day 2:
 - Practical Problems: p. 4
 - Integers and Decimals: p. 105 #123-128
- Day 3:
 - Integers and Decimals: p. 106 #129-140
 - Define: Dividend, Divisor, Quotient

Week 3



Words to remember:

- Multiplicand
- Multiplier



- Product
- Dividend
- Divisor
- Quotient

Textbook reference and written work:

- 5th Grade Mathematics p. 5-7
- 5th Grade Mathematics p. 107-109

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 5
 - Integers and Decimals: p. 107 #141-149
 - Review: Multiplicand, Multiplier, Product, Dividend, Divisor, Quotient
- Day 2:
 - Practical Problems: p. 6
 - Integers and Decimals: p. 108 #150-154
 - Note to teacher: It is okay for the student to work through the same problem more than once. For example, #150 may need to be wrestled with considerably before understanding is achieved. Embrace the challenge of the challenge!
- Day 3:
 - Practical Problems: p. 7
 - Integers and Decimals: p. 109 #155-160
 - Have students copy down the 6 Principles in their notebook

Week 4



Words to remember:

- Decimal point
- Decimals
- Decimal Fractions

Textbook reference and written work:

- 5th Grade Mathematics p. 8-9
- 5th Grade Mathematics p. 110-113
- Conversion chart (see below)

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 8
 - Integers and Decimals: p. 110-111 #161-175
 - Define: Decimal Point
- Day 2:
 - Practical Problems: p. 9
 - Integers and Decimals: p. 111-112 #176-188
 - Define: Decimals, Decimal Fractions
- Day 3:
 - Integers and Decimals: p. 112-113 #189-197

 [Conversion Chart](#)

Week 5



Words to remember:

- Addition of decimals
- Subtraction of decimals

Textbook reference and written work:

- 5th Grade Mathematics p. 47-48
- 5th Grade Mathematics p. 27-32



Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 47
 - Integers and Decimals: p. 27-28 #198-206
 - Define:
- Day 2:
 - Practical Problems: p. 48
 - Integers and Decimals: p. 28-30 #207-222
 - Define:
- Day 3:
 - Integers and Decimals: p. 30-32 #223-260

Week 6



Words to remember:

- Addition of decimals
- Subtraction of decimals

Textbook reference and written work:

- 5th Grade Mathematics p. 49-50
- 5th Grade Mathematics p. 32-35

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 49
 - Integers and Decimals: p. 32-33 #261-270
- Day 2:
 - Practical Problems: p. 50
 - Integers and Decimals: p. 33-34 #271-274
- Day 3:
 - Integers and Decimals: p. 34-35 #275-287
 - Define: Diagonal

Week 7



Topics:

- Measuring
- Basic Geometry

Textbook reference and written work:

- 5th Grade Mathematics p. 51-52
- 5th Grade Mathematics p. 35-38

Suggested Daily Schedule:

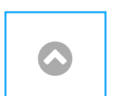
- Day 1:
 - Practical Problems: p. 51
 - Integers and Decimals: p. 35-36 #288-293
- Day 2:
 - Practical Problems: p. 52
 - Integers and Decimals: p. 36-37 #294-302
 - Define: Isosceles Triangles; Base
- Day 3:
 - Integers and Decimals: p. 37-38 #303-314

Week 8



Topics:

- Addition and Subtraction of decimals
- Multiplication of Decimals



- Basic Geometry

Textbook reference and written work:

- 5th Grade Mathematics p. 53-54
- 5th Grade Mathematics p. 38-41

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 53
 - Integers and Decimals: p. 38-39 #315-326
- Day 2:
 - Practical Problems: p. 54
 - Integers and Decimals: p. 39-40 #327-337
 - Define: Odd Numbers
- Day 3:
 - Integers and Decimals: p. 40-41 #338-345
 - Define: Equilateral Triangle

Week 9



Topics:

- Multiplication of Decimals

Textbook reference and written work:

- 5th Grade Mathematics p. 55-56
- 5th Grade Mathematics p. 41-45

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 55
 - Integers and Decimals: p. 41-42 #346-357
 - Note to teacher: Feel free to pick and choose among these exercises if you believe doing all of them will prove tedious for the students.
- Day 2:
 - Practical Problems: p. 56
 - Integers and Decimals: p. 42-43 #358-373
 - Define: Odd Numbers
- Day 3:
 - Integers and Decimals: p. 43-45 #374-393

Week 10



Topics:

- Percentages

Textbook reference and written work:

- 5th Grade Mathematics p. 57-58
- 5th Grade Mathematics p. 45-47

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 57
 - Integers and Decimals: p. 45 #394-398
 - Define: Percentage (note: this is not explicitly defined in the text)
- Day 2:
 - Practical Problems: p. 58
 - Integers and Decimals: p. 45-46 #399-408
- Day 3:
 - Integers and Decimals: p. 46-47 #409-417



Week 11



Topics:

- Division of Decimals

Textbook reference and written work:

- 5th Grade Mathematics p. 59-60
- 5th Grade Mathematics p. 47-50

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 59
 - Integers and Decimals: p. 47-48 #418-425
- Day 2:
 - Practical Problems: p. 60
 - Integers and Decimals: p. 48-49 #426-436
- Day 3:
 - Integers and Decimals: p. 49-50 #437-451

Week 12



Topics:

- Division of Decimals

Textbook reference and written work:

- 5th Grade Mathematics p. 61-63
- 5th Grade Mathematics p. 50-51

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 61
 - Integers and Decimals: p. 50 #452-457
- Day 2:
 - Practical Problems: p. 62-63
 - Integers and Decimals: p. 51 #458-461
- Day 3:
 - Integers and Decimals review for test

Week 13



Topics:

- Integers and Decimals Test

Textbook reference and written work:

Suggested Daily Schedule:

- Day 1:
 - Review
- Day 2:
 - Review
- Day 3:
 - Test
 - Key

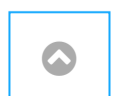
Week 14



Topics:

- Review

Textbook reference and written work:



- 5th Grade Mathematics p. 64-66
- 5th Grade Mathematics p. 51-53

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 64
 - Integers and Decimals: p. 51 #1-7
- Day 2:
 - Practical Problems: p. 65
 - Integers and Decimals: p. 52 #8-20
- Day 3:
 - Practical Problems: p. 66
 - Integers and Decimals: p. 53 #21-28

Week 15



Topics:

- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 67-69
- 5th Grade Mathematics p. 53-57

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 67
 - Integers and Decimals: p. 53-55 #29-45
- Day 2:
 - Practical Problems: p. 68
 - Integers and Decimals: p. 55-56 #46-62
- Day 3:
 - Practical Problems: p. 69
 - Integers and Decimals: p. 56-57 #63-78

Week 16



Topics:

- Review

Words to Remember:

- Pentagon
- Regular Pentagon

Textbook reference and written work:

- 5th Grade Mathematics p. 70-72
- 5th Grade Mathematics p. 58-59

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 70
 - Integers and Decimals: p. 58 #79-86
- Day 2:
 - Practical Problems: p. 71
 - Integers and Decimals: p. 58-59 #87-93
- Day 3:
 - Practical Problems: p. 72
 - Integers and Decimals: p. 59 #94-99

Week 17



Topics:

- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 73-75
- 5th Grade Mathematics p. 60-61

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 73
 - Integers and Decimals: p. 60 #100-105
- Day 2:
 - Practical Problems: p. 74
 - Integers and Decimals: p. 60-61 #106-109
- Day 3:
 - Practical Problems: p. 75
 - Integers and Decimals: p. 61 #110-118

Week 18



Topics:

- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 76-79

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 76-77
- Day 2:
 - Practical Problems: p. 78
- Day 3:
 - Practical Problems: p. 79

Week 19



Topics:

- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 80-83

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 80-81
- Day 2:
 - Practical Problems: p. 82
- Day 3:
 - Practical Problems: p. 83

Week 20



Topics:

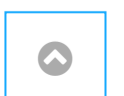
- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 84-87

Suggested Daily Schedule:

- Day 1:



- Practical Problems: p. 84-85
- Day 2:
 - Practical Problems: p. 86
- Day 3:
 - Practical Problems: p. 87

Week 21



Topics:

- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 88-91

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 88-89
- Day 2:
 - Practical Problems: p. 90
- Day 3:
 - Practical Problems: p. 91

Week 22



Topics:

- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 92-95

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 92-93
- Day 2:
 - Practical Problems: p. 94
- Day 3:
 - Practical Problems: p. 95

Week 23



Topics:

- Review

Textbook reference and written work:

- 5th Grade Mathematics p. 96-99

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 96-97
- Day 2:
 - Practical Problems: p. 98
- Day 3:
 - Practical Problems: p. 99

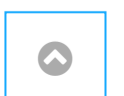
Week 24



Topics:

- Review

Textbook reference and written work:



- 5th Grade Mathematics p. 100-103

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 100-101
- Day 2:
 - Practical Problems: p. 102
- Day 3:
 - Practical Problems: p. 103

Week 25



Topics:

- Properties of Numbers

Words to Remember:

- Odd Number
- Even Number
- Multiple
- Common Multiple
- Factor/Divisor

Textbook reference and written work:

- 5th Grade Mathematics p. 104-106
- 5th Grade Mathematics p. 62-64

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 104
 - Properties of Numbers: p. 62 #1-6
- Day 2:
 - Practical Problems: p. 105
 - Integers and Decimals: p. 62-63 #7-10
- Day 3:
 - Practical Problems: p. 106
 - Integers and Decimals: p. 63 #11-18

Week 26



Topics:

- Properties of Numbers

Words to Remember:

- Composite number
- Prime number

Textbook reference and written work:

- 5th Grade Mathematics p. 107-109
- 5th Grade Mathematics p. 64-65

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 107
 - Properties of Numbers: p. 64 #19-25
- Day 2:
 - Practical Problems: p. 108
 - Integers and Decimals: p. 64-65 #26-30
- Day 3:
 - Practical Problems: p. 109
 - Integers and Decimals: p. 65 #31-33



Week 27



Topics:

- Properties of Numbers

Words to Remember:

- Prime number

Textbook reference and written work:

- 5th Grade Mathematics p. 110-112
- 5th Grade Mathematics p. 65

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 110
 - Properties of Numbers: p. 65-66 #34-40
- Day 2
 - Practical Problems: p. 111
 - Integers and Decimals: p. 66 #41-46
- Day 3:
 - Practical Problems: p. 112
 - Integers and Decimals: p. 66 #47-54

Week 28



Topics:

- Properties of Numbers

Words to Remember:

- Prime factor

Textbook reference and written work:

- 5th Grade Mathematics p. 113-115
- 5th Grade Mathematics p. 68-69

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 113
 - Properties of Numbers: p. 68 #55-62
- Day 2
 - Practical Problems: p. 114
 - Integers and Decimals: p. 68 #63-64
- Day 3:
 - Practical Problems: p. 115
 - Integers and Decimals: p. 69 #65-71

Week 29



Topics:

- Properties of Numbers

Words to Remember:

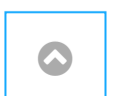
- Least Common Multiple

Textbook reference and written work:

- 5th Grade Mathematics p. 116-118
- 5th Grade Mathematics p. 69-71

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 116



- Properties of Numbers: p. 69-70 #72-78
- Day 2
 - Practical Problems: p. 117
 - Integers and Decimals: p. 70-71 #79-83
- Day 3:
 - Practical Problems: p. 118
 - Integers and Decimals: p. 71 #84-90

Week 30



Topics:

- Properties of Numbers

Words to Remember:

- Least Common Multiple

Textbook reference and written work:

- 5th Grade Mathematics p. 116-118
- 5th Grade Mathematics p. 71

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 119
 - Properties of Numbers: p. 71-72 #91-95
- Day 2
 - Practical Problems: p. 120
 - Integers and Decimals: p. 72 #96-98
- Day 3:
 - Practical Problems: p. 121
 - Integers and Decimals: p. 73 #99-105

Week 31



Topics:

- Divisibility of Numbers

Words to Remember:

- Principle 1
- Principle 2
- Principle 3
- Principle 4

Textbook reference and written work:

- 5th Grade Mathematics p. 122-124
- 5th Grade Mathematics p. 73-76

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 122
 - Properties of Numbers: p. 73-74 #106-110
- Day 2
 - Practical Problems: p. 123
 - Integers and Decimals: p. 74 #111-118
- Day 3:
 - Practical Problems: p. 124
 - Integers and Decimals: p. 75-76 #119-134



Week 32



Topics:

- Divisibility of Numbers

Words to Remember:

- Principle 5
- Principle 6
- Common Divisor
- Greatest Common Divisor

Textbook reference and written work:

- 5th Grade Mathematics p. 125-127
- 5th Grade Mathematics p. 76-77

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 125
 - Properties of Numbers: p. 76-77 #135-141
- Day 2
 - Practical Problems: p. 126
 - Integers and Decimals: p. 77 #142-144
- Day 3:
 - Practical Problems: p. 127
 - Integers and Decimals: p. 77 #145-151

Week 33



Topics:

- Divisibility of Numbers

Words to Remember:

- Greatest Common Divisor

Textbook reference and written work:

- 5th Grade Mathematics p. 128-130
- 5th Grade Mathematics p. 78

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 128
 - Properties of Numbers: p. 78 #152-156
- Day 2
 - Practical Problems: p. 129
 - Integers and Decimals: p. 78-79 #157-159
- Day 3:
 - Practical Problems: p. 130
 - Integers and Decimals: p. 79 #160-162

Week 34



Topics:

- Powers and Roots

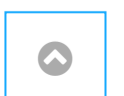
Words to Remember:

- Power

Textbook reference and written work:

- 5th Grade Mathematics p. 131-133
- 5th Grade Mathematics p. 79-80

Suggested Daily Schedule:



- Day 1:
 - Practical Problems: p. 131
 - Properties of Numbers: p. 79-80 #163-165
- Day 2
 - Practical Problems: p. 132
 - Integers and Decimals: p. 80 #166-172
- Day 3:
 - Practical Problems: p. 133
 - Integers and Decimals: p. 80 #173-176

Week 35



Topics:

- Powers

Words to Remember:

- Power

Textbook reference and written work:

- 5th Grade Mathematics p. 134-135
- 5th Grade Mathematics p. 81

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 134
 - Properties of Numbers: p. 81 #177-183
- Day 2
 - Practical Problems: p. 135
 - Integers and Decimals: p. 81 #184-187
- Day 3:
 - Practical Problems:
 - Integers and Decimals: p. 81 #188-196

Week 36



Topics:

- Powers

Words to Remember:

- Power

Textbook reference and written work:

- 5th Grade Mathematics p. 136-138
- 5th Grade Mathematics

Suggested Daily Schedule:

- Day 1:
 - Practical Problems: p. 136
 - Properties of Numbers:
- Day 2
 - Practical Problems: p. 137
 - Integers and Decimals:
- Day 3:
 - Practical Problems: p. 138
 - Integers and Decimals:

