



Math 4

MENTAL MATH

Map Mysteries


The Good and the Beautiful
CURRICULUM



Math 4

MENTAL MATH

Map Mysteries


The Good and the Beautiful
CURRICULUM

Created by the Simply Good and Beautiful Math Team

goodandbeautiful.com

© 2021 Jenny Phillips

All rights reserved. This document may be copied for use within your own family or homeschool group once each family has downloaded it directly from goodandbeautiful.com. The document may not be shared electronically in any way.

The document may not be printed by schools or organizations or for commercial purposes.

About This Book

This mental math book correlates with the *Simply Good and Beautiful Math 4 Course Book*, which directs the child to do a lesson box in this mental math book for each lesson (except for lessons that are assessments).

To complete the mental math, the parent or teacher should hold up the book so that the child sees the Questions page and the parent or teacher sees the Answer Key page (or it can be laid flat with the parent or teacher covering the answers with a paper or sticky note). The child should then complete the lesson box number that correlates to his or her lesson in the *Simply Good and Beautiful Math 4 Course Book*, giving the answers aloud. As the child gives the answers, the parent or teacher checks the answers and gives any correction needed. Upon completion of the lesson box, both the parent or teacher and student should place a check mark in the box to mark it as completed.

At the end of each page of four or five lesson boxes, the student is directed to place a sticker from page 71 onto a designated space on the map on page 69. At the end of the course, the student will have a completed picture of the map, and as a reward for completing the course, the child is then able to read the “You-Choose” book included in the course: *Hayden and the Hidden Village*. The map that the child created shows places included in the book.

Students who struggle with a mental math concept should be encouraged to continue through the lesson boxes as several skills will be repeated throughout the book.

Each mental math lesson box is designed to take less than five minutes to complete.

It is most desirable for mental math to be done without the aid of writing anything down. However, if needed, the child may use paper and pencil to help with the problems, with the goal of discontinuing the use of the paper and pencil at some point in the book.

The mental math lesson boxes do not correlate directly with the lessons taught in the *Simply Good and Beautiful Math 4 Course Book*.





QUESTIONS

LESSON 1

COMPLETE

Add 10 to a Number

Increase the digit in the tens place by 1. (The tens place is shown in red.)

$23 + 10$

$45 + 10$

$37 + 10$

$82 + 10$

Skip Count

- by 3s from 30 to 60
- by 25s from 400 to 500

LESSON 2

COMPLETE

Add 10 to a Number

Increase the digit in the tens place by 1. (The tens place is shown in red.)

$220 + 10$

$341 + 10$

$673 + 10$

$384 + 10$

Skip Count

- by 3s from 120 to 150
- backward by 25s from 500 to 400

LESSON 3

COMPLETE

Add 9 to a Number

Mentally add 10, and then subtract 1 from the sum.

$33 + 9$

$19 + 9$

$35 + 9$

$17 + 9$

$78 + 9$

Calendar

Name the months of the year.

LESSON 4

COMPLETE

Add 10 to a Number

Increase the digit in the tens place by 1.

$347 + 10$

$222 + 10$

$119 + 10$

$147 + 10$

Skip Count

- by 3s from 210 to 240
- backward by 25s from 625 to 525

LESSON 5

COMPLETE

Subtract 10 from a Number

Decrease the digit in the tens place by 1.

$24 - 10$

$45 - 10$

$37 - 10$

$16 - 10$

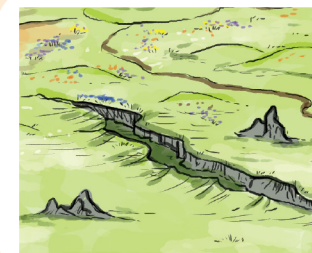
Calendar

There are 12 months in a year. How many months are in 2 years?

Twenty-four months from January is January. What is 25 months from January? What is 14 months from January?



After completing Lesson 5, place this piece onto your map on D-3.



LESSON 1

COMPLETE

Add 10 to a Number

Increase the digit in the tens place by 1. (The tens place is shown in red.)

$23 + 10 = 33$ $45 + 10 = 55$ $37 + 10 = 47$ $82 + 10 = 92$

Skip Count

- by 3s from 30 to 60 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60
- by 25s from 400 to 500 400, 425, 450, 475, 500

LESSON 2

COMPLETE

Add 10 to a Number

Increase the digit in the tens place by 1. (The tens place is shown in red.)

$220 + 10 = 230$ $341 + 10 = 351$ $673 + 10 = 683$ $384 + 10 = 394$

Skip Count

- by 3s from 120 to 150 120, 123, 126, 129, 132, 135, 138, 141, 144, 147, 150
- backward by 25s from 500 to 400 500, 475, 450, 425, 400

LESSON 3

COMPLETE

Add 9 to a Number

Mentally add 10, and then subtract 1 from the sum.

$33 + 9 = 42$ $19 + 9 = 28$ $35 + 9 = 44$ $17 + 9 = 26$ $78 + 9 = 87$

Calendar

Name the months of the year. January, February, March, April, May, June,
July, August, September, October, November, December

LESSON 4

COMPLETE

Add 10 to a Number

Increase the digit in the tens place by 1.

$347 + 10 = 357$ $222 + 10 = 232$ $119 + 10 = 129$ $147 + 10 = 157$

Skip Count

- by 3s from 210 to 240 210, 213, 216, 219, 222, 225, 228, 231, 234, 237, 240
- backward by 25s from 625 to 525 625, 600, 575, 550, 525

LESSON 5

COMPLETE

Subtract 10 from a Number

Decrease the digit in the tens place by 1.

$24 - 10 = 14$ $45 - 10 = 35$ $37 - 10 = 27$ $16 - 10 = 6$

Calendar

There are 12 months in a year. How many months are in 2 years? 24
Twenty-four months from January is January. What is 25 months
from January? February What is 14 months from January? March

NOTES



QUESTIONS

LESSON 53

COMPLETE

Shapes

Which number does each root word represent?

quad oct dec pent hex

Change from a Dollar

Determine the change from a dollar for each amount. Count up to the next ten, and then count by tens to 100.

13¢ 42¢ 72¢ 21¢ 63¢ 73¢

LESSON 54

COMPLETE

Add or Subtract a Number Ending in 9

48 - 29 99 + 32 55 - 49 26 + 139

Add 52 to a Number

Mentally add 50, and then add 2 to the sum.

132 + 52 68 + 52 227 + 52 325 + 52

LESSON 55

COMPLETE

Story Problems

- You have 4 dozen eggs and sell 29 individual eggs. How many eggs do you have left?
- Davis has $65¢ + 25¢$. Oscar has $69¢ + 22¢$. Who has more money?

Spell Numbers Aloud

Spell 100 | 1,000 | 1,000,000

LESSON 56

COMPLETE

Skip Count

- backward by 50,000s from 450,000 to 100,000
- by 25s from 575 to 725

Add 1, Subtract 1

Sometimes it is easier to add 1 to a number, find the sum, and then subtract 1.

24 + 75 74 + 125 25 + 124 124 + 75

LESSON 57

COMPLETE

Add 100,000

Increase the digit in the one hundred thousands place by 1.

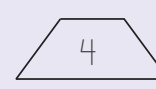
408,008 3,323,053 34,456,000 987,000

Factor and Product

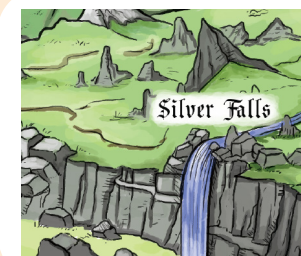
Point to each number and state whether it is a factor or product: $\frac{\times}{18}$

Shapes

State the name of each shape.



After completing
Lesson 57, place this piece
onto your map on B-4.



LESSON 53

COMPLETE

Shapes

Which number does each root word represent?

quad four oct eight dec ten pent five hex six

Change from a Dollar

Determine the change from a dollar for each amount. Count up to the next ten, and then count by tens to 100.

13¢ 87¢ 42¢ 58¢ 72¢ 28¢ 21¢ 79¢ 63¢ 37¢ 73¢ 27¢

LESSON 54

COMPLETE

Add or Subtract a Number Ending in 9

48 - 29 19 99 + 32 131 55 - 49 6 26 + 139 165

Add 52 to a Number

Mentally add 50, and then add 2 to the sum.

132 + 52 184 68 + 52 120 227 + 52 279 325 + 52 377

LESSON 55

COMPLETE

Story Problems

- You have 4 dozen eggs and sell 29 individual eggs. How many eggs do you have left? 19 eggs
- Davis has 65¢ + 25¢. Oscar has 69¢ + 22¢. Who has more money? Oscar

Spell Numbers Aloud

Spell 100 one hundred | 1,000 one thousand | 1,000,000 one million

LESSON 56

COMPLETE

Skip Count

- backward by 50,000s from 450,000 to 100,000
450,000, 400,000, 350,000, 300,000, 250,000, 200,000, 150,000, 100,000
- by 25s from 575 to 725
575, 600, 625, 650, 675, 700, 725

Add 1, Subtract 1

Sometimes it is easier to add 1 to a number, find the sum, and then subtract 1.

24 + 75 99 74 + 125 199 25 + 124 149 124 + 75 199

LESSON 57

COMPLETE

Add 100,000

Increase the digit in the one hundred thousands place by 1.

408,008 3,323,053 34,456,000 987,000
508,008 3,423,053 34,556,000 1,087,000

Factor and Product

Point to each number and state whether it is a factor or product:

9 factor
× 2 factor
18 product

Shapes

State the name of each shape.



hexagon



pentagon



trapezoid



octagon

NOTES

LESSON 115

COMPLETE

Change from a Dollar

Determine the change from a dollar for each amount. Count up to the next ten, and then count by tens to 100.

12¢ 47¢ 39¢ 24¢ 61¢ 81¢

Add Money Amounts

Add \$2.00, and then subtract 2 cents from the sum.

\$4.15 + \$1.98 \$6.37 + \$1.98 \$9.29 + \$1.98 \$1.98 + \$2.75

Skip Count

- by 25s from 500 to 700
- backward by 25s from 700 to 500

LESSON 116

COMPLETE

Roman Numerals

State the number for each Roman numeral.

XXXII XLIV LXVII XLII XCVI XCIV

Add 29 to a Number

Mentally add 30, and then subtract 1 from the sum.

13 + 29 78 + 29 29 + 175 29 + 90

Factor and Product

Point to each number and state whether it is a factor or product: $\times \frac{4}{3}$
12

Add 4 Numbers

25 + 25 + 15 + 15 25 + 150 + 75 + 15 30 + 40 + 20 + 16

LESSON 117

COMPLETE

Roman Numerals

State the number for each Roman numeral.

LVII LXXII LIII XXXV LXVI XXXI

Add 4 Numbers

25 + 25 + 15 + 50 25 + 125 + 75 + 15 25 + 75 + 15 + 50

LESSON 118

COMPLETE

Skip Count

- backward by 3s from 105 to 90
- by 20s from 20 to 200

Story Problems

- Each pair of students needs a jump rope. There are 36 students. How many jump ropes are needed?
- How many inches are in 4 feet 2 inches?

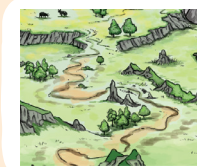
There are no mental math lesson boxes for Lessons 119 and 120 as they are assessments.



After completing Lesson 118, place the pieces below onto your map where indicated.



B-2



B-1

LESSON 115

COMPLETE

Change from a Dollar

Determine the change from a dollar for each amount. Count up to the next ten, and then count by tens to 100.

12¢ 88¢ 47¢ 53¢ 39¢ 61¢ 24¢ 76¢ 61¢ 39¢ 81¢ 19¢

Add Money Amounts

Add \$2.00, and then subtract 2 cents from the sum.

\$4.15 + \$1.98 \$6.37 + \$1.98 \$9.29 + \$1.98 \$1.98 + \$2.75
\$6.13 \$8.35 \$11.27 \$4.73

Skip Count

- by 25s from 500 to 700 500, 525, 550, 575, 600, 625, 650, 675, 700
- backward by 25s from 700 to 500 700, 675, 650, 625, 600, 575, 550, 525, 500

LESSON 116

COMPLETE

Roman Numerals

State the number for each Roman numeral.

XXXII 32 XLIV 44 LXVII 67 XLII 42 XCVI 96 XCIV 94

Add 29 to a Number

Mentally add 30, and then subtract 1 from the sum.

13 + 29 78 + 29 29 + 175 29 + 90
42 107 204 119

Factor and Product

Point to each number and state whether it is a factor or product:

4 factor
× 3 factor
12 product

Add 4 Numbers

25 + 25 + 15 + 15 25 + 150 + 75 + 15 30 + 40 + 20 + 16
80 265 106

LESSON 117

COMPLETE

Roman Numerals

State the number for each Roman numeral.

LVII 57 LXXII 72 LIII 53 XXXV 35 LXVI 66 XXXI 31

Add 4 Numbers

25 + 25 + 15 + 50 25 + 125 + 75 + 15 25 + 75 + 15 + 50
115 240 165

LESSON 118

COMPLETE

Skip Count

- backward by 3s from 105 to 90 105, 102, 99, 96, 93, 90
- by 20s from 20 to 200 20, 40, 60, 80, 100, 120, 140, 160, 180, 200

Story Problems

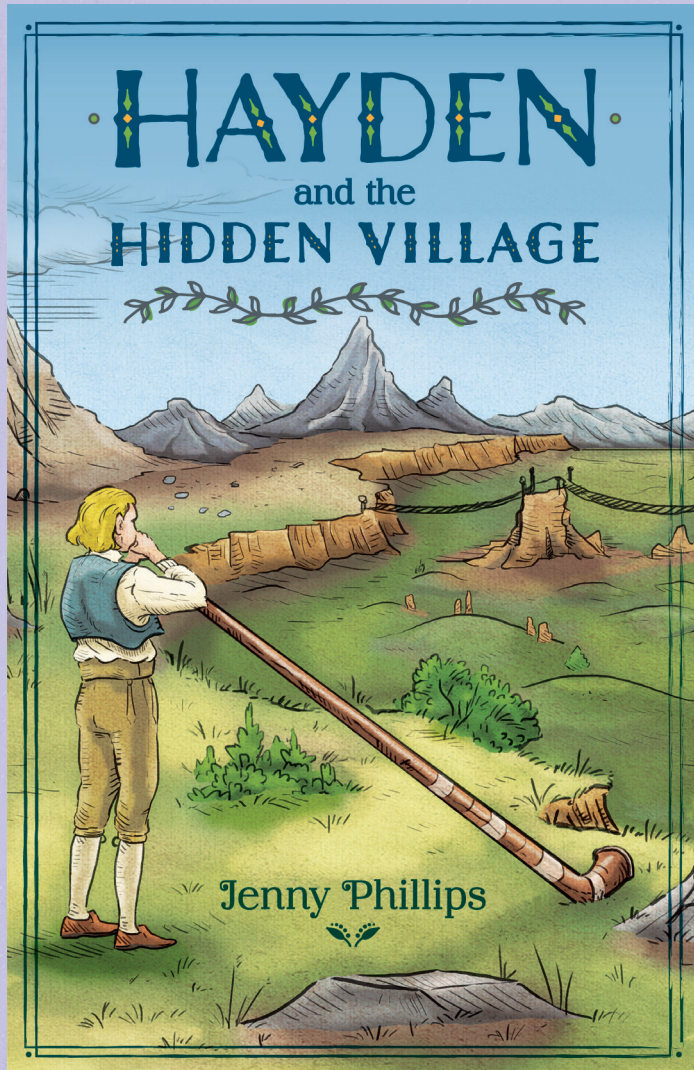
- Each pair of students needs a jump rope. There are 36 students. How many jump ropes are needed? 18 jump ropes
- How many inches are in 4 feet 2 inches? 50 inches

There are no mental math lesson boxes for Lessons 119 and 120 as they are assessments.

NOTES

Wait to read
this book until
after you have
completed the
course book!

The Adventure Begins



LONG AGO, A BOY NAMED HAYDEN WAS about to have an adventure. He had no idea, however, because this summer day started out calmly. The sweet melody of cowbells and the whispering wind gave no hint of anything unique or unusual about this day. Hayden lay back on the mountain grass and folded his hands across his stomach, using his rolled-up sweater as a pillow. As he stared up at the clouds collecting into big puffs, he began to sing the song he had been making up in his mind about homophones. For, you see, he did most of his schoolwork each day up in the high pasture as he tended the cows and made sure they did not get close to the cliffs.

“H - a - i - r” is how I say

Something that I brush each day.

“H - a - r - e” is a mammal that I love to see.

“B - r - a - k - e” makes the wagon stop for me.

“B - r - e - a - k” is not good for my knee.

Hayden repeated the song again and then smiled proudly. His mother, who had passed away a couple of years ago, had loved learning. She had collected as many books as she could for their small home library. The family had tried to follow her love of learning after she was gone, and Father took up the role of teacher.

One of the cows had come near Hayden, and he spoke to her, as he often spoke to his cows. “It might be lonely up here in the high pasture,” he said to the dark tan cow named Buttercup, “but it sure is beautiful.”

Buttercup didn’t even look up as she feasted on mouthfuls of green, dew-covered grass.



“Hey! ‘Beautiful’ is one of my spelling words,” said Hayden, still talking to the cow. “Father said to practice my spelling words three times today. Tell me, Buttercup, if I get it right: b - e - a - u - t - i - f - u - l. And here it is in syllables: beau - ti - ful. Are you impressed?”

The cow looked up and let out a short moo, looking as if she were not impressed.

“OK, if you think it is easy, you try to spell ‘beautiful,’ Buttercup. Try breaking it into syllables: beau - ti - ful.”

The cow turned, flipped its tail at an annoying fly, and ambled away.

Hayden laughed and rolled onto his stomach. Resting his chin on his hands, he gazed out across the familiar but stunning landscape. His soul soaked in all the wonders around him—a little piece of heaven. He followed the outlines of the jagged mountain peaks, and he viewed the rolling hills carpeted in softly blowing grass and the sweeping fields of pretty yellow and white wildflowers in the valley. He spotted a group of deer by the church in the valley. Hayden had grown so fond of this area since his family had moved here four years ago. Slowly, Hayden turned his gaze far into the distance to admire the pretty Silver Falls cascading majestically off a cliff into Emerald Lake. Today, he also dared to study the thick pine forest in the valley past the waterfall, a sight he usually avoided because it made him so nervous.

“The Forest of Fog,” Hayden said aloud. He pondered what he had heard about the forest. No one he knew had ever gone into that forest. Supposedly, there was a fog in the



Hayden had not ridden a horse since he had fallen off one last year. He was scared. However, little Chloe's happy face appeared in his mind. What a dear girl with her swinging braids and her rosy cheeks. The siblings had grown so close after their mother's death. Chloe was in danger. "I don't care if I break a bone; I'm going to ride to Farmer Bilxby's. Maybe he can help me. He has helped our family with past emergencies." He quickly collected a loaf of bread, a rope, a pocketknife, and a jug of water. He wrapped the items in a blanket and threw them in a basket on the horse's side. Then he rode off, following the narrow road to Mr. Bilxby's farm with his hair flying in the wind.

Farmer Bilxby was not home, and Hayden saw no sign of Chloe or Thomas. Once again, he found himself not knowing what to do as he tried to collect his thoughts.



You Choose



If Hayden rides his horse to Abe's home to find help, skip to **Part C** on page 58.

OR



If Hayden goes to the church and climbs the bell tower to see if he can see Chloe or Thomas somewhere in the valley, skip to **Part E** on page 64.



Hayden heard the trickle of a small stream nearby. Slowly, he led the limping horse to it, cleaned the wound, and then tore part of his shirt into strips and bound them around the wound. After tying his horse to a large boulder that was nearby, he patted the horse lovingly and said, “I will be back to collect you as soon as I can.”

Hayden tore off a piece of bread and ate it as he walked quickly toward the Forest of Fog, not even giving his mind a place to think of all the stories he had heard about that mysterious forest. Instead, he thought just of Chloe. Sofia had said she was sure her father could help. He must find him.

Hayden did hesitate when he got to the edge of the forest, but only for a moment. With determination, he entered the thick trees. Instantly, he heard a crashing noise in the bushes, and he froze in place. Two deer bounded out of the bushes and disappeared into the thick trees.

It was just a couple of cute deer, Hayden reassured himself. He looked around. There was no fog—at least not yet. The birds chirped merrily in the treetops, and the pine branches moved peacefully in the breeze. There was no path . . . for the first minute. Then, Hayden discovered a wide and relatively smooth dirt road. He started running down the middle of it, hoping to catch up with Abe, although he felt that that was unlikely to happen.

After five minutes passed, he heard a voice floating to him from a distance. “Is that you, Hayden? Where are you going?”

Hayden stopped in his tracks and looked around. Abe

was walking toward him. The short, kind-looking man had unhitched his horses and was letting them drink at a nearby creek.

Within a few minutes, the horses were hitched again, and Hayden rode in the wagon on the seat next to Abe.

“Now, don’t you worry,” Abe reassured him after hearing Hayden’s story. “If your sister was following Thomas, everything is OK. I know Thomas and his village. Chloe is likely in no danger.”

“But *we* are in danger,” said Hayden. “This forest is full of fog and quicksand.”



“There is no fog or quicksand,” said Abe. Then he sighed. “I guess I’m going to have to tell you the story. This forest

Map



	1	2	3	4	5
A					
B					
C					
D					
E					

