Math 4

MENTAL MATH

Map Mysteries

The Good and the Beautiful
CURRICULUM

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.

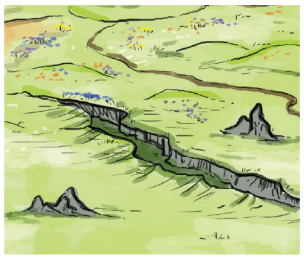
24 − 10 45 − 10 37 − 10 16 − 10

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.



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ANSWER KEY

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

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QUESTIONS

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:

$$\begin{array}{r} 4 \\ \times\ 3 \\ \hline 12 \end{array}$$

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

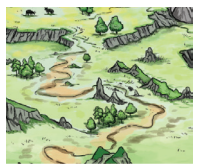
- Each pair of students needs a jump rope. There are 36 students. How many jump ropes are needed?
- How many inches are in 4 feet 2 inches?

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

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ANSWER KEY

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 $6.13 $6.37 + $1.98 $8.35 $9.29 + $1.98 $11.27 $1.98 + $2.75 $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 42 78 + 29 107 29 + 175 204 29 + 90 119

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

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

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

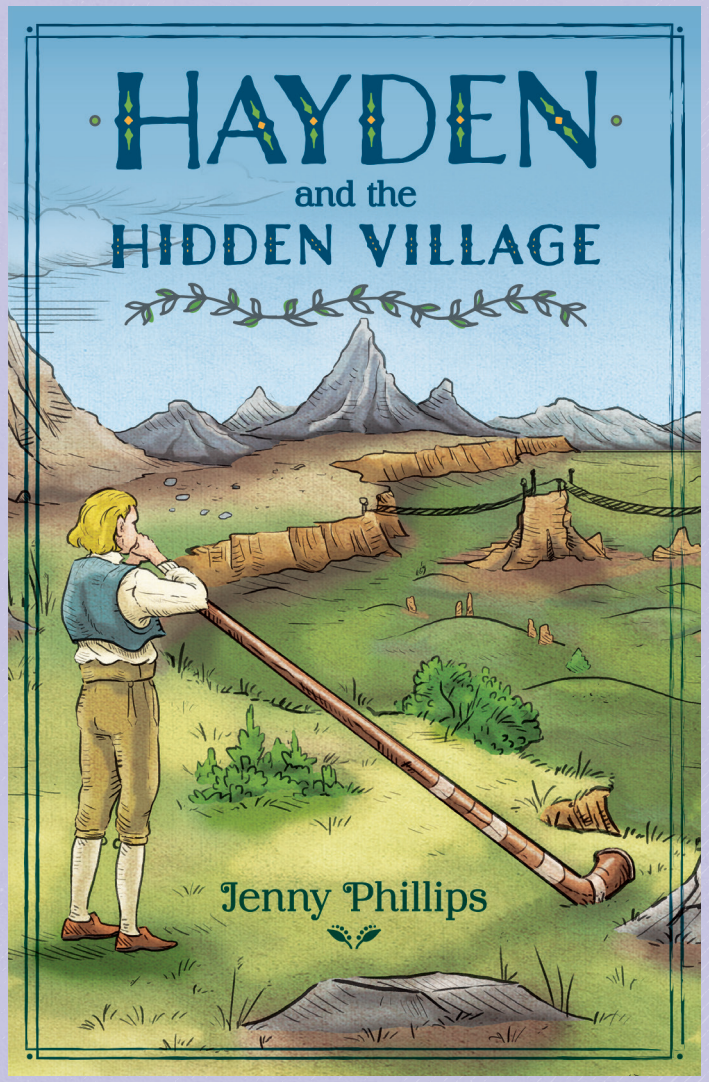
- Each pair of students needs a jump rope. There are 36 students. How many jump ropes are needed? 18 jump ropes
- How many inches are in 4 feet 2 inches? 50 inches

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

NOTES

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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

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Hayden brought the cows home just before lunch. He didn't like leaving Chloe home all day since Father was gone. He planned on eating lunch with Chloe and Thomas and then taking Chloe with him back up to the high pasture for the rest of the day.

As he neared the house, Hayden was surprised that Chloe didn't run out to meet him as she normally did when she heard the cowbells tinkling down the little road. After taking care of the cows in a hurry, he burst into the house.

"Chloe!" his voice echoed in the little home. No one was there, but there was a note on the table. It was in Chloe's handwriting:

Thomas ran away. I'm going to follow him.

I'll be OK. Don't worry.

Follow him! thought Hayden. *That was a terrible idea!* Hayden was not annoyed with Chloe; he was frightened for her! *An eight-year-old girl should not be out alone. There were snakes and cliffs and—* Hayden's imagination went wild. He ran to the stable and found only the brown horse; the white horse was missing. "Oh no!" he cried as he ran a hand through his hair. "What should I do?"

You Choose

A If Hayden overcomes his fear of horses and rides to Mr. Bilxby's farm for help, go to **Part A** on page 56.

OR

B If Hayden runs to the high pasture where he can see the whole valley and maybe spot Thomas or Chloe, skip to **Part B** on page 57.

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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.

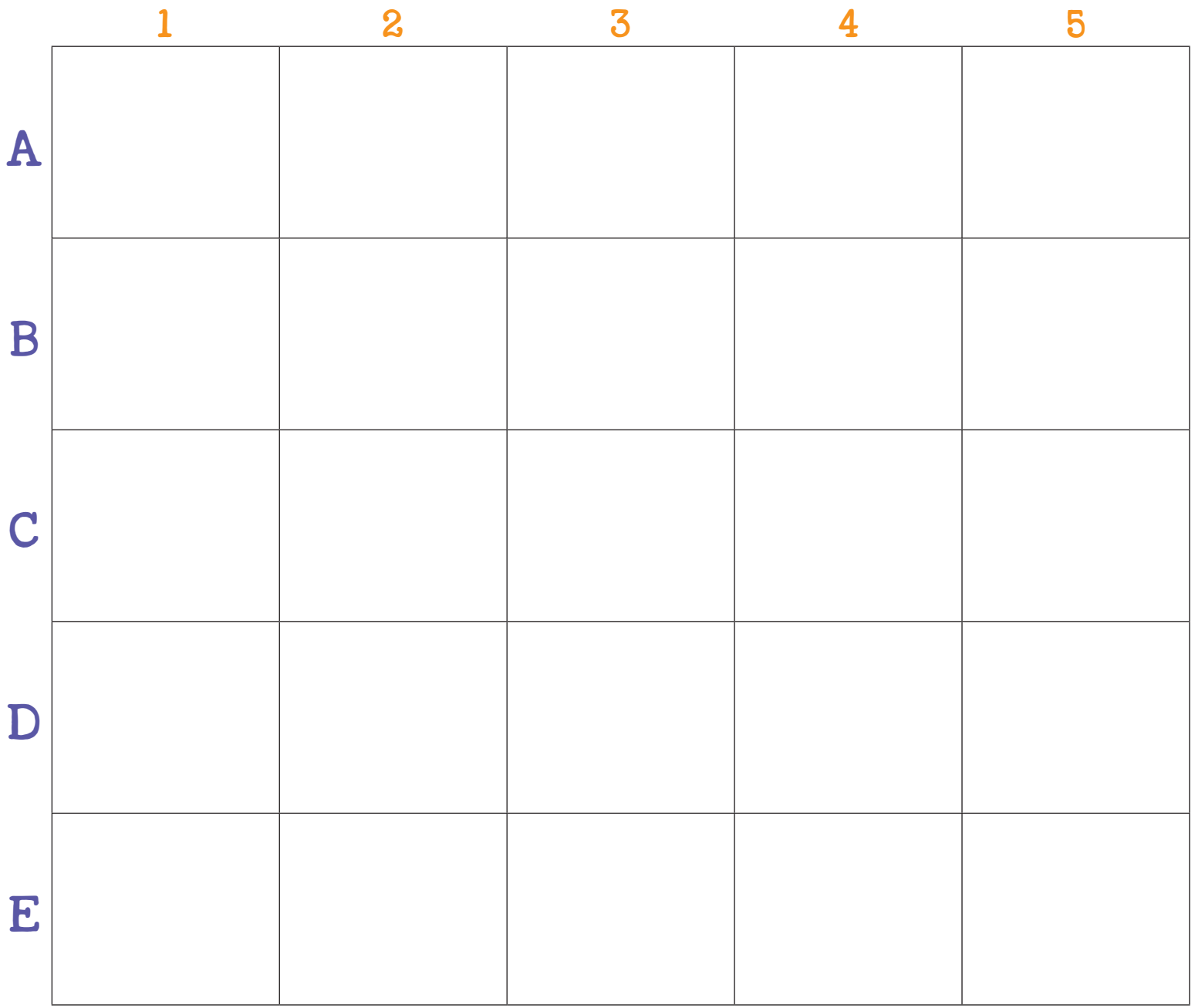
OR



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.

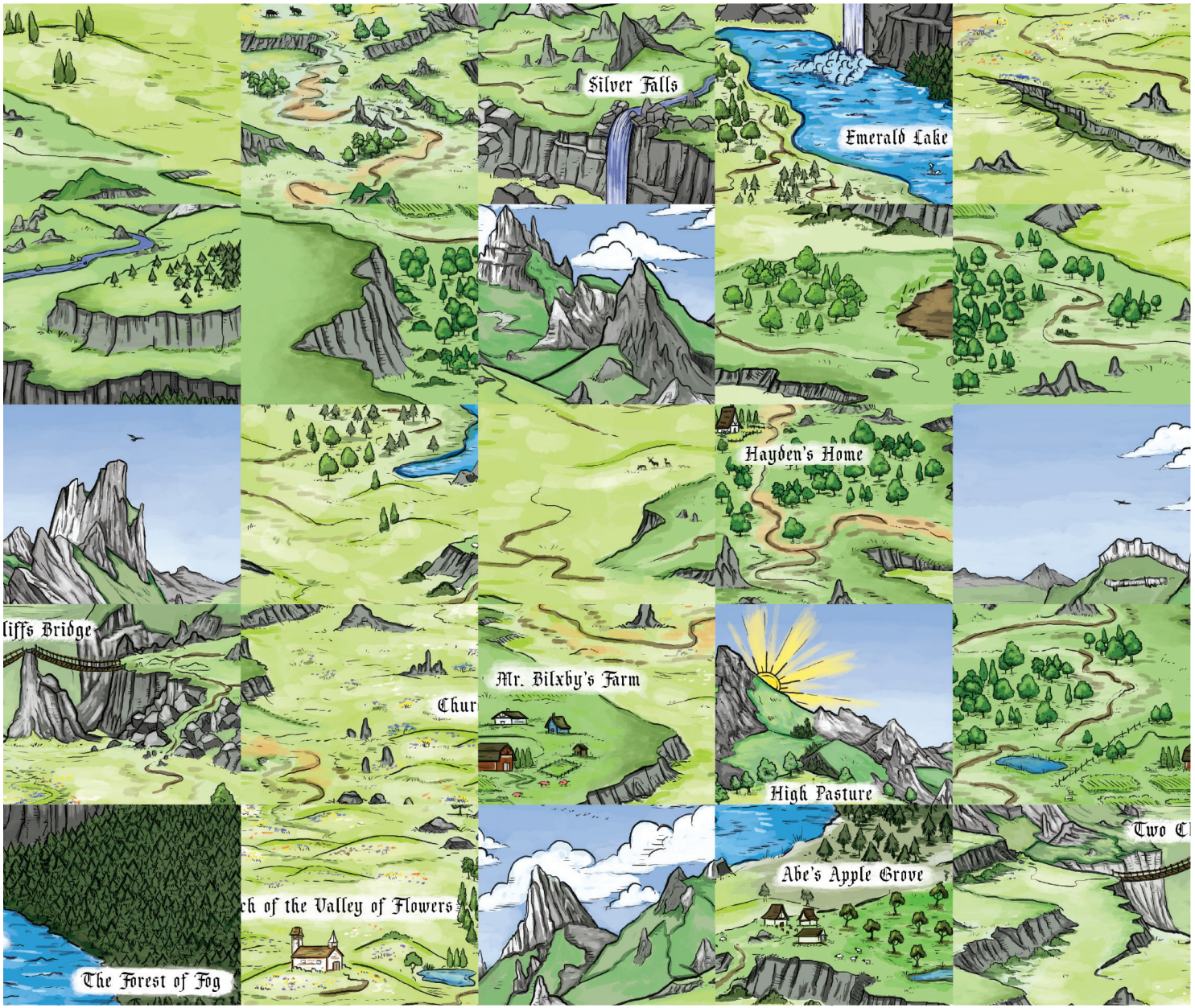
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Map



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Stickers



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