

3rd Grade Math Curriculum Sample

A Grade Ahead will challenge your students and help them achieve their goals!

Beginning in June 2021, our 3rd graders will be participating in A Grade Ahead Online, a blended learning program that integrates both traditional and electronic methods to teach students.

Our students begin the week learning a lesson and answering practice questions with paper and pencil in our monthly lesson booklets. Then they go online to a website to complete three days of online activities to master the topic of the week.

Here's how it works:



Monthly Blended Learning Lesson Booklet

Students receive a lesson booklet each month that is broken into four weeks. Every week, students are introduced to a new topic with explanations and examples followed by student practice questions.

At the end of this document, you will find a full sample of one week's lesson and practice problems from A Grade Ahead's 3rd Grade math curriculum.



A Grade Ahead Online Activities

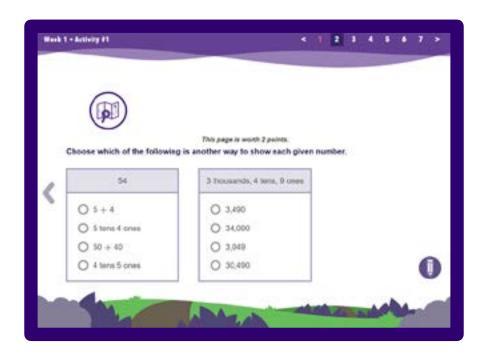
After learning the lesson and practicing problems with a traditional approach, students continue learning online through activities at online.agradeahead.com. Every week, students have three days of homework that can include both curriculum facts and word problems.



A Grade Ahead Online offers many benefits to students and parents, including

- Interactive and colorful questions with formats like matching, drag and drop, fill in the blank, multiple choice, and more.
- **Automatic grading** that saves times for parents and provides immediate feedback for students. They know whether they got a question right or wrong as they are going through the homework, so they can make adjustments if necessary.
- A rationale for every online question that explains the correct answer, so students can learn from their mistakes immediately.
- Student progress reports that are easily accessible without parents needing to upload any data. In fact, a parent has access to raw data from all of his or her student's online work.
- Adaptive learning paths that provide more challenging questions to students who perform well on the first set of activities.

Here is a peek at a few of our online exercises:







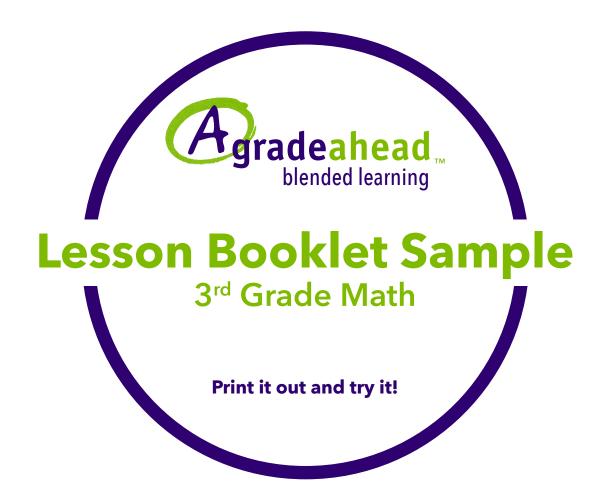
Want to see how A Grade Ahead works first-hand?

We have attached an entire lesson and one day's worth of homework for you to print out and try.









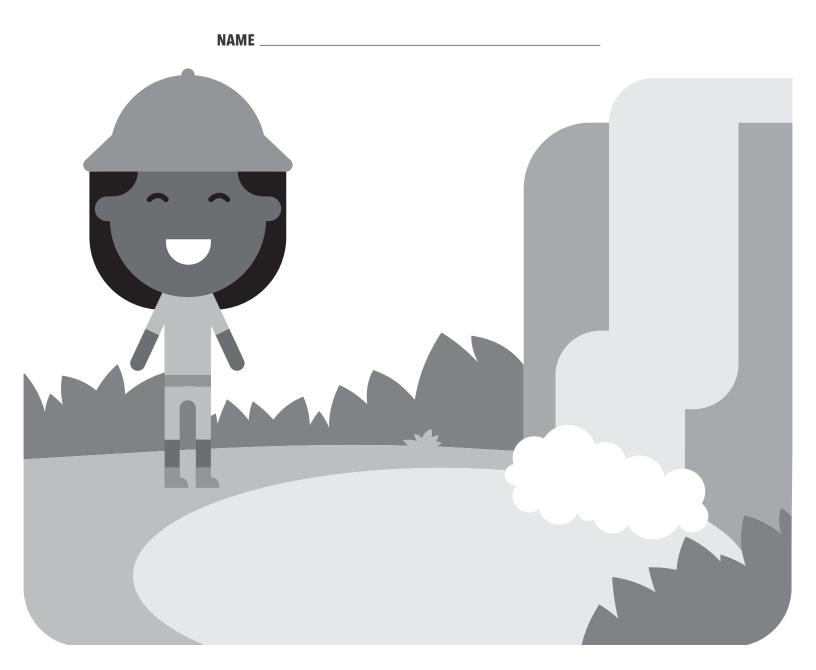




3th Grade • Month 1

MATH

BLENDED LEARNING LESSON BOOKLET



Place Value / Standard, Expanded, & Word Form

A. Place Value

Place value is used to determine the size of a number and compare it with other numbers.

Any number is written using ten different digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. When you move to the left in a number, each place is equal to ten times the value of the place to the right.

Student Goals:

I will learn place value, standard form, expanded form, and word form of a 4digit number.

I will be able to write a number in any of the forms mentioned above.



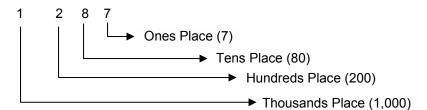
Note: Students should be familiar with the hundreds place value learned in 2nd grade. 3rd graders will learn place value up to the thousands.

Think about the number 1,287.

Starting from the right, the *right-most* digit is the <u>ones</u> place. There are 7 ones in this example (7 ones equal 7).

The next digit to the left of the ones is the <u>tens</u> place. It tells you that there are 8 tens (8 tens equal 80). The next digit to the left of the tens is the <u>hundreds</u> place. It tells you how many hundreds there are in the number. The number 1,287 has 2 hundreds (2 hundreds equal 200).

The *left-most* digit is the <u>thousands</u> place. It tells you how many thousands there are in the number. In this number, there is 1 thousand (1 thousand equals 1,000).



A chart helps to learn place value. It matches each digit in the number to its value. Below is an example:



Example: Determine the place value of each digit in the number 6,142 using the chart. You can do this by asking yourself the following questions: how many thousands, how many hundreds, how many tens, and how many ones?

Thousands	Hundreds	Tens	Ones
6	1	4	2

The chart can also be used in reverse to find the place value of a digit. For instance, you can look at the char and see that the 2 is in the ones place.



Note: To increase clarity in reading a larger number, all numbers greater than 999 should be written with a comma between the hundreds and thousands place. Example: 5,672 instead of 5672. Starting from the right, you add a comma after every 3 numbers.







Example: What is the number: 3 thousands 5 tens?

3 thousands is 3,000. 5 tens is 50. So the number is 3,000 + 50 = 3,050.



Example: What is the place and value of 3 in the number 2,386?

2,386 is a four-digit number. The second digit is the 3, and it is in the hundreds place, which tells us that there are 3 hundreds in the number. The place of 3 is the hundreds, and its value is **300**.



Note: Students must understand the difference between the place of a number and its value. In the example above, the place of 6 is the ones, and its value is 6. The place of 8 is the tens, and its value is 80. The place of 3 is the hundreds, and its value is 300. The place of 2 is the thousands, and its value is 2,000.



Example: What is the number: 7 thousands 4 hundreds 5 ones?

Use the place value chart. Put the numbers in the correct column. Put a 0 where there is no digit given.

Thousands	Hundreds	Tens	Ones
7	4	0	5

The number is 7,405.



Teaching Tip: Show the students that when they say a 3 or 4-digit number, they use the words "hundred" and "thousand." This gives them a hint as to what the place value of certain digits is. Example: 1,456 is read as one thousand four hundred fifty-six. So, it already tells them that the place value of 1 is the thousands, and 4 is the hundreds.

	Write the place value of the underlined digit? What is its value?		
	1. 3 <u>9</u> 5	2. <u>7</u> 05	
Student Practice	3. 1,00 <u>9</u>	4. <u>8.</u> 019	
	5. <u>9</u> 91	6. <u>9</u> ,990	
	7. 1,0 <u>6</u> 5	8. 7, <u>1</u> 29	



B. Standard, Expanded, and Word Forms

There are three basic ways of writing a number: the standard form, the expanded form, and the word form.

The *standard form* of any number is the number written with numbers. For example, the standard form for 35 is **35**.

The *expanded form* of a number is the number broken down by place value. For example, the expanded form of 35 is **30 + 5** (since there is a 3 in the tens place, and is equal to 30, and a 5 in the ones place.)

The word form of a number is written using words. For example, 35 in word form is thirty-five.



Example: For the number 124

Standard form: 124

Expanded form: 100 + 20 + 4
Word form: one hundred twenty-four



Example: For the number 1,405

Standard form: 1,405

Expanded form: 1,000 + 400 + 5

Word form: One thousand four hundred five.



Note: If a place has a value of 0, it is omitted in the expanded form.



Example: Write the following in expanded form: **72**

70 + 2. Expanded form can also be written: 7 tens 2 ones (sometimes the latter is also called the Place value form).



Example: Write the following in standard form: 8 hundreds, 9 ones

Use the place value chart. Put the numbers in the correct column. Put a 0 where there is no digit given

no digit given.				
Thousands	Hundreds	Tens	Ones	
	8	0	9	

The number is 809.



Note: If a place value has no number, don't forget to place a zero (0) in that spot. Otherwise, you may end up with incorrect answers. For instance, if you forgot the zero in the tens place for 8 hundreds and 9 ones, you would end up with 89, instead of 809.







Example: Write the following in standard form: Four thousand twenty.

Use the place value chart. Put the numbers in the correct column. Put a 0 where there is no digit given.

Thousands	Hundreds	Tens	Ones
4	0	2	0

The number is 4,020.



Student **Practice**

Write the expanded form of the following numbers.



Student **Practice**

Write the following in standard form.

Write the word form of the following numbers.





- 21. 400 + 90 + 4
- 22. 3 hundreds 7 tens 3 ones.
- 23. 7,000 + 100 + 6

C. Adding and Subtracting Place Value Numbers



Example: Write the following in *standard form*, then calculate the answer.

3 tens 5 ones plus 9 tens

35 + 90 = 125



Example: Write the following in *expanded form*. Then calculate the answer.

3 hundreds 3 tens 5 ones plus 2 hundreds 9 tens (300 + 30 + 5) + (200 + 90) = 335 + 290 = 625



Example: Calculate forty-two minus 2 tens. Write the answer in word form.

42 - 20 = 22 = twenty-two



Example : Use the following digits to write all numbers greater than 4000.

7

The numbers must be greater than 4,000, so the number in the thousands place must be either 4 or greater than 4, and only 6 and 7 are greater than 4 in this set. When doing these types of problems, list the numbers from smallest to biggest.

6,027 6,072 6,207 6,270 6,702 6,720 7,026 7,062 7,206 7,260 7,602 7,620

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- Write the following in standard form and calculate.
- 24. Add 4 hundreds 6 tens and 5 hundreds 4 ones:
- Student Practice
- 25. Subtract 2 hundreds from 9 hundreds 3 tens 5 ones:
- 26. Add 8 tens and 8 hundreds 9 ones:
- 27. Subtract 2 hundreds 3 tens 4 ones from 2 hundreds 4 tens 4 ones:

The following items are on sale. Write the savings on each item in the blank space provided below. [Regular price - Sale price] Summer dresses Regular price: \$70 Sale price: \$58 28. Student **Practice** Stockings Regular price: \$8 Sale price: \$5 29. _____ Students Sandals Regular price: \$67 Sale price: \$45 30. _____ must show their work in the space **Jackets** Regular Price: \$130 Sale price: \$95 31. _____ provided. 32. Rhonda buys a dress and a pair of sandals. How much money does she save by buying at the reduced prices? 33. Amy spends \$100 and buys four items at the reduced price. She buys two pairs of stockings. What else does she buy? 34. What are the savings on two jackets and two pairs of stockings? **CHALLENGE!** 35. What is the largest number that can be made from the following digits? 36. What number is in the hundreds place?



MATH: Place Value (W1)

Answers of Student Practice

4.		۵)	
1)	ten; 90	2)	hundreds; 700
3)	ones; 9	4)	thousands; 8,000
5)	hundreds; 900	6)	thousands; 9,000
7)	tens, 60	8)	hundreds, 100
9)	800 + 40 + 9	10)	1,000 + 600 + 50 + 8
11)	500 + 40 + 8	12)	3,000 + 200 + 50 + 8
13)	200 + 40 + 8	14)	5,000 + 600 + 80
15)	7,406	16)	3,066
17)	2,070	18)	5,890
19)	325	20)	9,090
21)	four hundred ninety-four	22)	three hundred seventy-three
23)	seven thousand one hundred six		
24)	964 [460+504]	25)	735 [935 - 200]
26)	889 [80+809]	27)	10 [244 - 234]
28)	\$12 [70 – 58]	29)	\$3 [8 – 5]
30)	\$22 [67 – 45]	31)	\$35 [130 – 95]
32)	\$34 [12+22]	33)	two pairs of sandals [45+45+5+5=100]
34)	\$76 [35+35+3+3]	35)	5,410
36)	4		



Head online to complete all days of the course:

MATH: Place Value (W1)







Now, more than ever, kids need supplemental education!

A Grade Ahead's Enrichment at Home program makes it easy for you to help your students get caught up - and even stay ahead of - their peers. Our students are top performers at the heads of their classes who get into lvy League schools and perform well on standardized tests. They reach their goals of becoming doctors, engineers, and other well-paid professionals.

Why Enrichment at Home?

- 1. Our curriculum is outstanding, with clear lessons and worksheets that are challenging and interesting. They are not boring and repetitive like some other programs.
- 2. Our parents love us, with more than 90% referring us to their friends and families year after year. See what real parents are saying in "Our Results".
- 3. It's flexible. You decide what curriculum your child needs and when to complete the lessons and worksheets.

4. It's cost-effective. We provide everything you need to implement our enrichment program, starting at \$50 per month, with many discount options offered.

Build Your Own Program

Commit to six months and save \$50! To see other discounts, visit our <u>Pricing page</u>. Whether your child is ahead of his or her peers or has some catching up to do, the Enrichment at Home program allows you to select the lessons your child will receive. By reviewing our curriculum calendar, you can look at each month's topics and decide what is best for your child. Visit our Math or English web pages, and choose the grade you want to review. You will find the details on the right-hand side. When registering, you can specify which month you want to receive. If your student is on pace with his or

her peers, simply register, and we will send you the current month of curriculum. We can always make adjustments if the work is too hard or too easy.



Is your student ready to join the 25,000 other students who have benefited from our pragmatic, effective approach? Register today to see what A Grade Ahead can do for your family.





Our monthly curriculum is delivered to your home each month for \$50/month.