## $3^{\text {rd }}$ Grade Mat Curriculum Sample

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

Beginning in June 2021, our $3^{\text {rd }}$ 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 $3^{\text {rd }}$ 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:




## $3^{\text {th }}$ Grade • Month 1 MATH <br> BLENDED LEARNING LESSON BOOKLET

NAME $\qquad$

## 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.
$\sqrt{ }$ 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 ones place. There are 7 ones in this example ( 7 ones equal 7).
The next digit to the left of the ones is the tens place. It tells you that there are 8 tens ( 8 tens equal 80 ). The next digit to the left of the tens is the hundreds 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 thousands 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 $\mathbf{3}$ 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 $\mathbf{3 0 0}$.


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 $\mathbf{7 , 4 0 5}$.

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.


## 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.


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.

| 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 $\mathbf{4 , 0 2 0}$.


Student Practice

Write the expanded form of the following numbers.
9. $849=$ $\qquad$
11. $548=$ $\qquad$ 12. $3,258=$ $\qquad$
13. $248=$ $\qquad$ 14. $5,680=$ $\qquad$


Student Practice

Write the following in standard form.
15. $7,000+400+6=$ $\qquad$ 16. Three thousand sixty six $=$ $\qquad$
17. Two thousand seventy $=$ $\qquad$ 18. $5000+800+90=$ $\qquad$
19. $300+20+5=$ $\qquad$ 20. Nine thousand and ninety $=$ $\qquad$


Write the word form of the following numbers.
21. $400+90+4$

Student
22. 3 hundreds 7 tens 3 ones.
23. $7,000+100+6$

## MATH: Place Value (W1)

## 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.

| 2 | 0 | 6 | 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 |


| Student |
| :--- | :--- |
| Practice |$\quad$| Write the following in standard form and calculate. |
| :--- |
| $25 . \quad$ Add 4 hundreds 6 tens and 5 hundreds 4 ones: |



## Answers of Student Practice

| 1) | ten; 90 |
| ---: | :--- |
| 3) | ones; 9 |
| 5) | hundreds; 900 |
| 7) | tens, 60 |
| 9) | $800+40+9$ |
| $11)$ | $500+40+8$ |
| $13)$ | $200+40+8$ |
| 15) | 7,406 |
| 17) | 2,070 |
| 19) | 325 |
| 21) | four hundred ninety-four |
| 23) | seven thousand one hundred six |
| 24) | $964 \quad[460+504]$ |
| 26) | $889[80+809]$ |
| 28) | $\$ 12[70-58]$ |
| $30)$ | $\$ 22[67-45]$ |
| $32)$ | $\$ 34[12+22]$ |
| $34)$ | $\$ 76[35+35+3+3]$ |
| $36)$ | 4 |

2) hundreds; 700
3) thousands; 8,000
4) thousands; 9,000
5) hundreds, 100
6) $1,000+600+50+8$
7) $3,000+200+50+8$
8) $5,000+600+80$
9) 3,066
10) 5,890
11) 9,090
12) three hundred seventy-three
13) 735 [935-200]
14) 10 [244-234]
15) $\$ 3[8-5]$
16) $\$ 35$ [130-95]
17) two pairs of sandals $[45+45+5+5=100]$
18) 5,410

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 Ivy 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

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.


