# 1ˢᵗ Grade Math

Curriculum Sample

A Grade Ahead's rigorous, year-round enrichment program will challenge your child to a higher academic standard. Our math material consists of two components: **numerical drills** and **curriculum**. Numerical drills are quick exercises that will improve your child's speed and accuracy in computational skills while our monthly curriculum includes mathematical topics that your child will see in school. Both numerical drills and curriculum work together to ensure a complete understanding and mastery of each topic.

The numerical drills and curriculum will each have an in-depth lesson (which we call Examples), as well as homework, and answers. In these next pages, we offer a closer look at what our examples, homework, and answers offer as well as a specific sample of both numerical drills and curriculum.
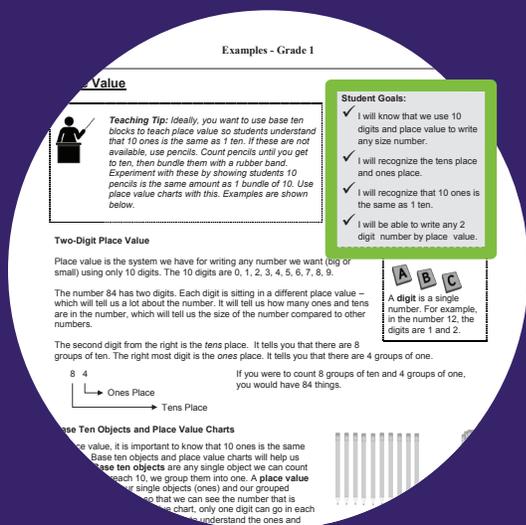
Student Goals

Student goals are listed at the top right of the Examples each week. These are topics that your child should understand by the end of the week.

Teaching Tip

Teaching tips are suggestions to help you or your teacher present the topic to your child. These could include topics to review first or even an activity to do with your child.

ABC Word Boxes

These word boxes define terms used within the lesson that your child may not know.

Examples

To illustrate the topic, examples are provided to you and your child. These examples help demonstrate how to solve the problem or figure out the answer.

Homework

Each week, four days of homework are given to apply concepts from that week's lesson and reinforce the topic.

Answers - Grade 1

Week: 5 – Day 1

1-2)	2 tens 3 ones; 23	3-4)	5 tens 1 one; 51
5-6)	6 tens; 8 ones; 68	7)	O
8)	T	9)	O
10)	O	11)	1
12)	7	13)	16 green beads [6+10 = 16]
14)	11 red beads [16-5 = 11]	15)	8 blue beads [11-3 = 8]
16)	18 orange beads [10+8 = 18]	17)	4 yellow beads [16 green; 20 total; 20-16 = 4]

Answers

Answers are provided to check your child's homework. Enter the scores into the Parent Portal to track progress and note which areas may need more work.

Date: _____ Time Taken: _____

Add and subtract these numbers.

1.   20
   +   7

     ------

2.   11
   +   3

     ------

3.   24
   +   3

     ------

4.   13
   +   5

     ------

5.   14
   +   3

     ------

6.   23
   +   4

     ------

7.   11
   +   2

     ------

8.   24
   +   5

     ------

9.   13
   +   3

     ------

10.   22
   +   3

     ------

11.   22
   +   5

     ------

12.   20
   +   6

     ------

13.   21
   +   4

     ------

14.   12
   +   4

     ------

15.   25
   +   4

Day: 1

1) 27	2) 14	3) 27
4) 18	5) 17	6) 27
7) 13	8) 29	9) 16
10) 25	11) 27	12) 26
13) 25	14) 16	15) 29

Word Problems

Teaching Tip: Word problems are a large part of the math curriculum. When teaching how to approach and solve them to students at a younger age, be sure to make the problems relatable. Point out the addition and subtraction keywords in all questions. Be sure to teach using the C.U.B.E method.

Student Goals:

✓ I will be able to read a word problem and know what information to use to solve it.

✓ I will learn the keywords that will help me know when to add or subtract in word problems.

✓ I will use the C.U.B.E. method to solve word problems.

Word problems connect what you are learning about (addition and subtraction) to 'real life.' In doing this, you must be able to understand the story, pick out important information, and translate English terms to math terms.

Add means to join or group together.
Subtract means to remove or take away.

When you begin a word problem, you should do the following:
(1) Read through it carefully one to two times.
(2) Picture the story from the word problem in your head. Act it out with classmates or family members if needed.
(3) Follow the C.U.B.E. method.

The C.U.B.E. Method

Circle the numbers: *These are the numbers you will be adding or subtracting.*
Underline the question: *This word or phrase will tell you to add or subtract the numbers you circled.*
Box the keyword or key phrase**:** *This will remind you what is being asked and to include the item you are counting with your number answer.*
End with a picture: *Use the steps above to help you solve the problem.*

Below is a list of keywords and key phrases that tell you whether to add or subtract in a word problem. Memorize them and their meanings to help you solve word problems.

Add +	Subtract -
Altogether	Difference
Both	Fewer
Total	How many more
Sum	Left
Combine	Remains

Example: Ted had 2 toy trucks to play with. His friend Eddie had 3 toy trucks to play with. How many toy trucks did they have altogether?

First, read the problem a few times. Make sure you can picture the story in your head.
Next, use the C.U.B.E. method to help you find the answer.

Circle the numbers, **U**nderline the question, **B**ox the keyword, **E**nd with a picture.

Ted had ②toy trucks to play with. His friend Eddie had ③toy trucks to play with.
How many toy trucks did they have altogether?
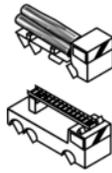
Ted: Eddie:
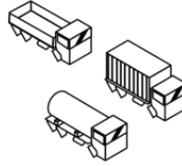
<u>How many toy trucks did they have</u> altogether?

If you look back at the question that you underlined, you will see that the keyword "altogether" is used, and "altogether" tells you to add Ted's and Eddie's toy trucks.

Altogether:

+   =

2   3   5
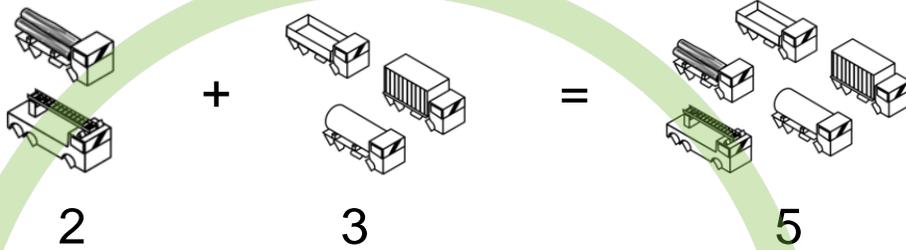
2 + 3 = 5 toy trucks

Note: Be sure to write the name of the item you are counting in your answer.

Example: Jake has (16) stamps. Donald has (8) fewer stamps. <u>How many stamps does Donald have</u>?

The numbers are circled, the question is underlined, and the keyword is boxed. The keyword tells you to subtract to find the answer. Use this information to draw a picture to help you solve.

16 − 8 = 8 stamps

Note: When drawing pictures, students do not have to draw the specific item mentioned in the word problems; they may use circle, dots, lines, etc. to represent them.

Date:_____   Start time: _____   End time: _____

Score: _____/16

Label the following keywords or key phrases as addition (+) or subtraction (-).

(1)   **Altogether**   _____

(2)   **Difference**   _____

(3)   **Fewer**   _____

(4)   **How many more**   _____

(5)   **Both**   _____

(6)   **Sum**   _____

(7)   **Left**   _____

(8)   **Total**   _____

Word Problems: Use the C.U.B.E. method in each question.

Dana picked up 8 rocks. Her friend, Katie, picked up 13 rocks. How many more rocks did Katie pick up?

(9)   **C**ircle the numbers.
       Underline the question.
       Box the keyword or key phrase.

(10)   **Which keyword or key phrase is in this word problem?**

_____

(11)   **Does it tell you to add or to subtract?**

         (a)   add   (b)   subtract

Nicole has 4 fewer dogs than cats. She has 6 cats. How many dogs does she have?

(12)   **C**ircle the numbers.
         Underline the question.
         Box the key word or key phrase.

(13)   **Which keyword or key phrase is in this word problem? Write it in the blank below.**

_____

(14)   **Does it tell you to add or subtract?**

         (a)   add   (b)   subtract

(15)   **End with a picture. Draw a picture to help you answer the question. Be sure to include what you are counting in your answer.**

_____

CHALLENGE!!! Use the C.U.B.E. method.
(16) **Amy bought 16 pieces of gum. She gave her sister 5. How many pieces of gum does she have left?**

Week: 1 – Day 1

1)	+	2)	-
3)	-	4)	-
5)	+	6)	+
7)	-	8)	+

9) Dana picked up ⑧ rocks. Her best friend, Katie picked up ⑬ rocks. How many more rocks did Katie pick up?

10) "How many more"

11) b

12) Nicole has ④ fewer dogs than cats. She has ⑥ cats. How many dogs does she have?

13) "Fewer"

14) b

15) Make sure students draw a picture of 6 cats and cross out 4; 2 dogs [6-4=2]

16) 11 pieces of gum [Students should do all the steps of the C.U.B.E. method; 16-5=11]