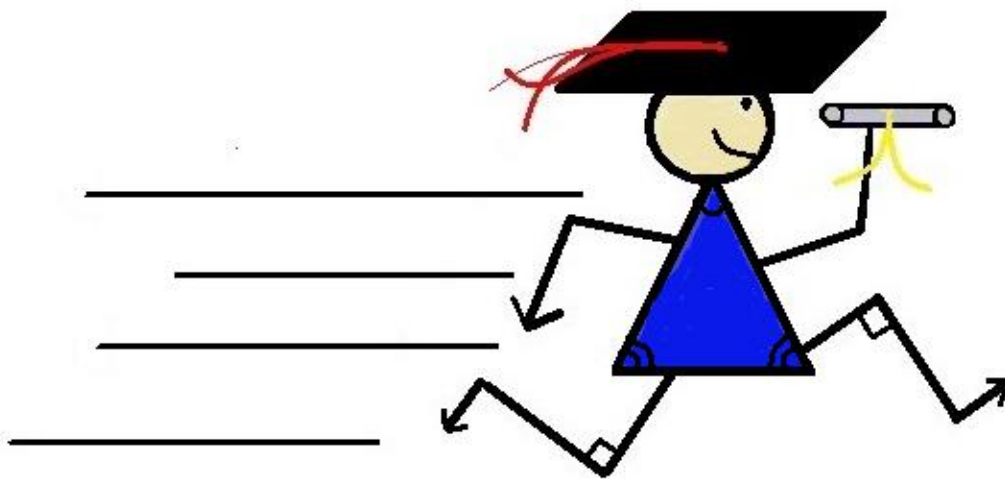


# CHAPTER 1:

## ADDITION AND SUBTRACTION

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Learn Math Fast

## LESSON 1: ADDING AND SUBTRACTING NUMBERS UP TO 5

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You will need 10 pennies to complete this chapter. The coins will help you to “see” the numbers you are adding or subtracting.

Follow each lesson. Play the game that is taught and then complete the worksheet. After you complete the worksheet, play the game several more times until you feel you are ready for the timed test. If you can complete the test in the time given, then you are ready to continue. Otherwise, keep practicing and playing the game until you can answer the timed test in the time given. If the timer is too stressful, change your goal to answering each problem correctly the FIRST time without counting on your fingers.

Place five coins on a table in front of you. Count the pennies out loud to make sure you have exactly five pennies. Next, separate the pennies into two groups. One group has one penny and the other has four pennies.



Say out loud, while looking at the pennies, “ $1 + 4 = 5$ .”

Now move over one of the four pennies to create two new groups. One group has two pennies and the other one has three.



Say out loud, “ $2 + 3 = 5$ .”

Slide over one penny to make two new groups like the ones below.



Say out loud, "3 + 2 = 5."

Move one of the two pennies over to form two new groups.



Say aloud, "4 + 1 = 5."

Finally, move over the last penny and say, "5 + 0 = 5." Repeat these steps over and over, until you completely memorize all five groups of numbers that equal five:

$$1 + 4$$

$$2 + 3$$

$$3 + 2$$

$$4 + 1$$

$$5 + 0$$

**PLAY THE GAME!** To play the game, the teacher will say, "I will give you a number and you tell me how much more I need to make five." For example, if the teacher says, "Three," the student should answer, "Two" because  $3 + 2 = 5$ . If the teacher says, "Four," then the student should answer, "One" because  $4 + 1 = 5$ .

Go through each number (not in numerical order) over and over until every group is memorized. Stop here and play the game several times.

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Put your five coins back on the table.



Now move over three of the pennies and say, "5 - 3 = 2." Move the pennies around to help answer 5 - 4 = 1.



Use the coins to help you answer the following questions:

How much is 5 - 2?

How much is 5 - 1?

How much is 5 - 4?

How much is 5 - 0?

How much is 5 - 3?

When you feel like you know all the combinations that equal five, addition and subtraction, complete the next worksheet.

Name \_\_\_\_\_ Date \_\_\_\_\_

## WORKSHEET 1

Add the following.

$2 + 3 =$        $3 + 2 =$        $3 + 1 =$        $5 + 0 =$

$2 + 2 =$        $3 + 0 =$        $3 + 2 =$        $1 + 2 =$

$5 + 0 =$        $4 + 1 =$        $1 + 4 =$        $3 + 2 =$

$3 + 1 =$        $4 + 0 =$        $2 + 2 =$        $2 + 3 =$

$2 + 2 =$        $2 + 3 =$        $1 + 1 =$        $3 + 2 =$

$1 + 4 =$        $1 + 2 =$        $5 + 0 =$        $1 + 1 =$

Subtract the following.

$5 - 1 =$        $5 - 4 =$        $5 - 2 =$        $5 - 3 =$

$5 - 5 =$        $5 - 2 =$        $5 - 3 =$        $5 - 1 =$

$5 - 0 =$        $5 - 4 =$        $5 - 5 =$        $5 - 2 =$

$4 - 2 =$        $3 - 1 =$        $5 - 3 =$        $5 - 4 =$

$2 - 1 =$        $1 - 0 =$        $5 - 2 =$        $5 - 3 =$

$4 - 3 =$        $5 - 1 =$        $5 - 3 =$        $4 - 3 =$

$5 - 4 =$        $5 - 2 =$        $4 - 3 =$        $5 - 3 =$

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## 30 SECOND TEST NO. 1

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You won't need your pencil for this test because I want you to say your answers out loud instead. If you can correctly answer the following 20 problems in less than 30 seconds, then you are ready to continue. If it takes you longer than 30 seconds, keep practicing until you can quickly answer all these problems.

NOTE: The timer is just a suggestion, it is not necessary. If being timed is stressful or if you are having trouble saying all the answers in 30 seconds, you can drop the timer. Speed isn't the goal here. KNOWING the answers without guessing or counting on your fingers is the goal. If you really know all the answers you can continue.

The student should hold the book and shout out the answers. A helper or teacher should look at the Answer Card to make sure the student is correct. If you don't have an Answer Card, you can print one from our website, or just view them on your mobile device while the student takes the test. No Internet connection? Just simply jot down the answers on a piece of paper and look at those while the student looks at the book.

$2 + 3 =$

$3 + 1 =$

$2 + 2 =$

$5 + 0 =$

$1 + 1 =$

$3 + 2 =$

$1 + 2 =$

$4 + 1 =$

$5 - 3 =$

$5 - 2 =$

$5 - 4 =$

$5 - 5 =$

$5 - 1 =$

$5 - 4 =$

$5 - 2 =$

$5 - 3 =$

$5 - 0 =$

$5 - 3 =$

$5 - 4 =$

$5 - 2 =$

If you are guessing or getting the answers wrong, you need to practice some more. There are three different ways to do that. You can use the coins and go through the lesson again. You can play the game I explained earlier or complete another worksheet. It's your choice. Repeat whichever method you like best until you KNOW all the answers.

## LESSON 2: ADDING AND SUBTRACTING NUMBERS UP TO 6

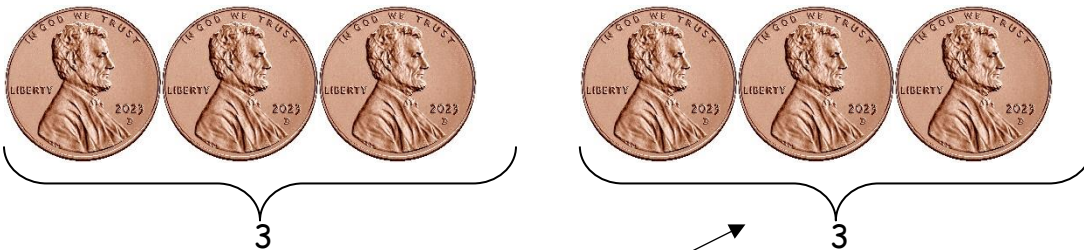
You will need six pennies this time. Start by counting the six pennies and then placing them on the table like the ones below.



Say out loud, " $1 + 5 = 6$ ." Move over one penny.



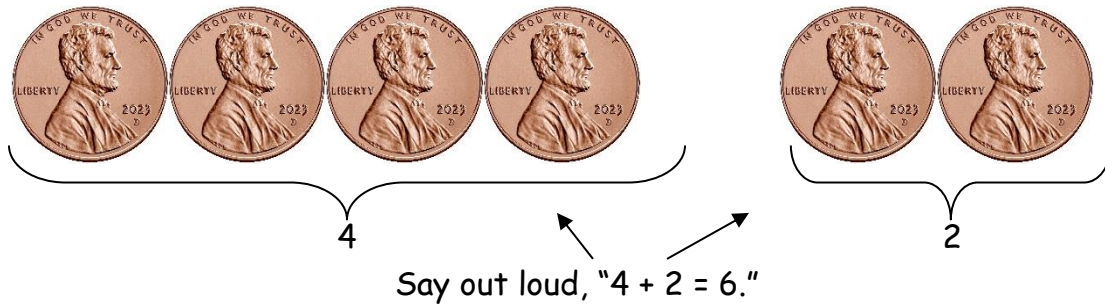
Say out loud, " $2 + 4 = 6$ ." Move over one penny to make two groups.



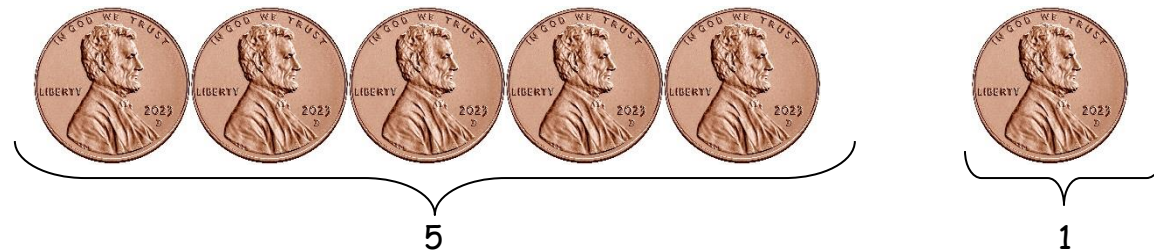
Say out loud, " $3 + 3 = 6$ ."

Since six pennies can be divided into two equal groups, we call six an **even** number because the two groups are even. When we had only five pennies, we couldn't separate them into two equal groups, so we call five an **odd** number.

Slide one over to make two new groups.



Move over one more penny to make these groups.



"5 + 1 = 6." And finally, say, "6 + 0 = 6."

Repeat all six groups several times. Once you are familiar with all the combinations that equal six, play the game! The teacher will say, "I'll give you a number and you tell me how much more I need to make six." Play this game until you can answer each problem in one or two seconds.

Answer the following questions. Use the coins to help find the answer.

How much is 6 - 2?

How much is 6 - 5?

How much is 6 - 1?

How much is 6 - 3?

How much is 6 - 4?

How much is 6 - 0?

Is 6 an odd number or an even number?

Is 5 an odd number or an even number?

Is 4 an odd or even number?

Complete the next worksheet for some more practice.



Name \_\_\_\_\_ Date \_\_\_\_\_

## WORKSHEET 2

Add the following.

$2 + 3 =$

$3 + 2 =$

$3 + 1 =$

$5 + 0 =$

$2 + 4 =$

$3 + 3 =$

$3 + 2 =$

$1 + 5 =$

$6 + 0 =$

$4 + 1 =$

$4 + 2 =$

$3 + 2 =$

$3 + 1 =$

$4 + 0 =$

$1 + 4 =$

$2 + 3 =$

$2 + 2 =$

$3 + 3 =$

$1 + 1 =$

$3 + 2 =$

$1 + 5 =$

$4 + 2 =$

$5 + 0 =$

$3 + 3 =$

Subtract the following.

$5 - 1 =$

$5 - 4 =$

$5 - 2 =$

$5 - 3 =$

$6 - 4 =$

$6 - 2 =$

$6 - 3 =$

$6 - 5 =$

$5 - 0 =$

$6 - 1 =$

$5 - 5 =$

$6 - 0 =$

$4 - 2 =$

$3 - 1 =$

$5 - 3 =$

$6 - 4 =$

$2 - 1 =$

$1 - 0 =$

$5 - 2 =$

$6 - 2 =$

$4 - 3 =$

$5 - 1 =$

$6 - 3 =$

$5 - 3 =$

$6 - 4 =$

$5 - 4 =$

$3 - 3 =$

$5 - 2 =$

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## 30 SECOND TEST NO. 2

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You can put your pencil down because this test will be done with your voice. Try to answer these 20 problems in less than 30 seconds. If you can, you are ready for Lesson 3. If you can't, keep practicing until you can. There is no hurry.

$3 + 3 =$

$2 + 3 =$

$4 + 2 =$

$5 + 1 =$

$3 + 2 =$

$2 + 4 =$

$4 + 1 =$

$3 + 3 =$

$6 - 5 =$

$5 - 3 =$

$6 - 4 =$

$6 - 3 =$

$5 - 2 =$

$6 - 2 =$

$6 - 1 =$

$5 - 4 =$

$2 + 2 =$

$3 + 3 =$

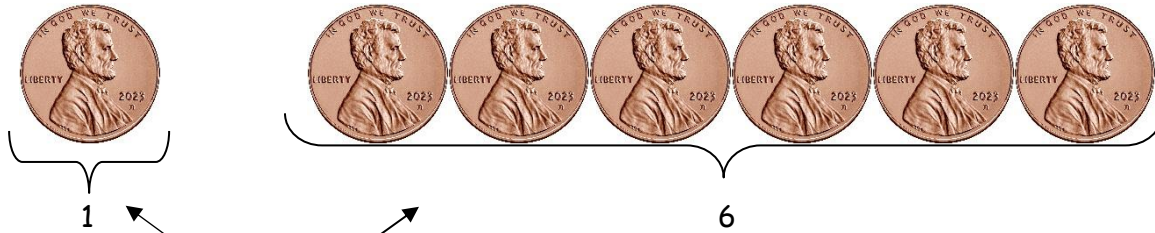
$2 + 3 =$

$3 + 2 =$

Answers are available on our website under the "Existing Customers" tab.

## LESSON 3: ADDING AND SUBTRACTING NUMBERS UP TO 7

It is time to move up to seven pennies. Lay them out and count them up. Let's start the grouping process.



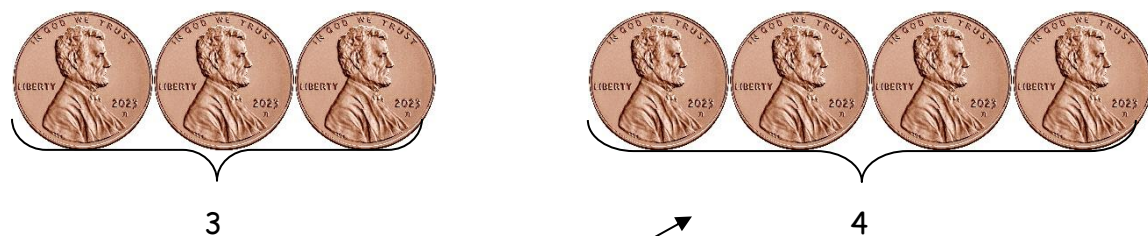
Say out loud, "1 + 6 = 7."

Move over one penny.



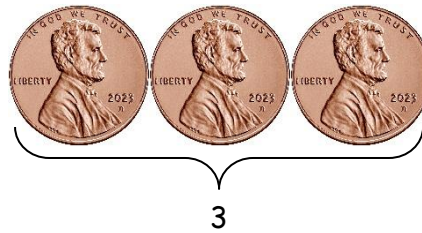
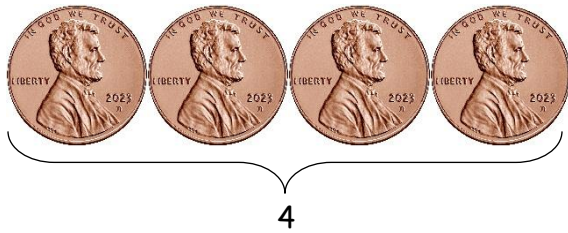
Say out loud, "2 + 5 = 7."

Slide one over.



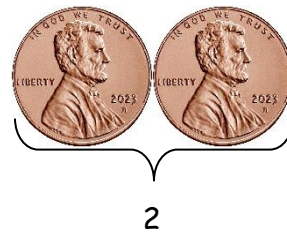
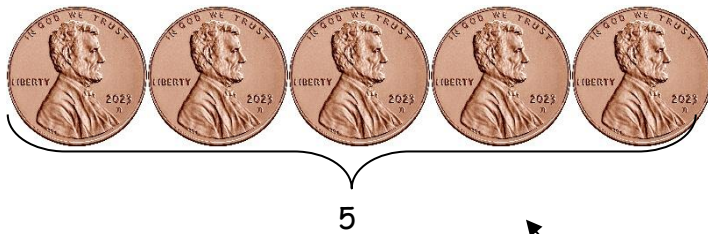
Say out loud, "3 + 4 = 7."

Move a penny over.



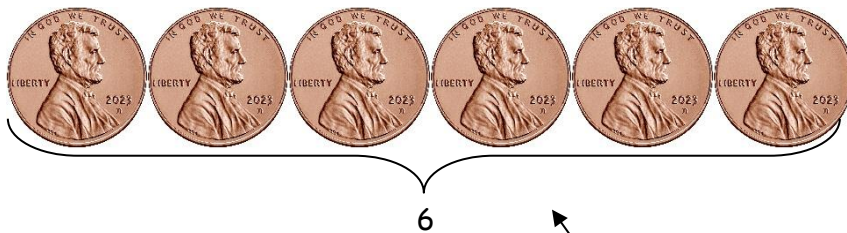
Say out loud, "4 + 3 = 7."

Shift a penny to the left...



Say out loud, "5 + 2 = 7."

One more time...



Say out loud, "6 + 1 = 7."

And finally say, "7 + 0 = 7."

**PLAY THE GAME!** It is time to play the game! The teacher says, "I'll give you a number and you tell me how much more I need to make 7." Keep practicing and make sure you REALLY learn  $3 + 4$  and  $5 + 2$ , before you go to the next lesson. Answer the following questions, while looking at the coins:

How much is  $7 - 4$ ?

How much is  $7 - 5$ ?

How much is  $7 - 3$ ?

How much is  $7 - 2$ ?

How much is  $6 - 4$ ?

How much is  $6 - 3$ ?

How much is  $5 - 3$ ?

How much is  $6 - 2$ ?

How much is  $5 - 2$ ?

Is 7 an odd number or even number?

Complete the next worksheet for more practice.