

# Home Chapter Support

## Chapter 2 Subtraction Within 20

### What Is My Child Learning and Why?

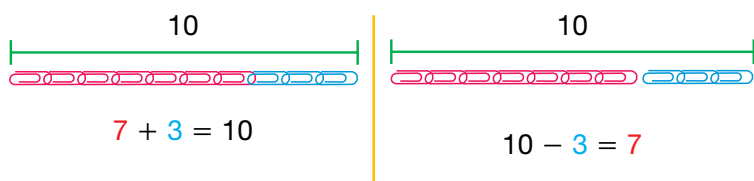
Your child will learn to subtract within 20. He/she will use various strategies to find differences, including take apart, compare, count on, fact families, equations, and working backward. Learning different strategies will allow your child an opportunity to decide which approach he/she is most comfortable with and help your child become more familiar with subtracting numbers using mental math.

Your child will explore the relationship between addition and subtraction. For example,  $4 + 7 = 11$  is related to  $11 - 7 = 4$ . Your child uses a bar model to see the whole alongside the smaller parts of a subtraction problem. This thinking helps your child understand “why” an operation works, which can be applied to multiplication and division operations in the future.

Here are some examples of concepts your child will learn in this chapter.

### Example

Kim joined 7 red paper clips to 3 blue paper clips to make a chain. Then she took off the 3 blue paper clips from the chain. Write two equations to show what Kim did.

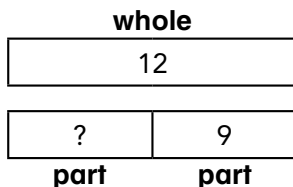


$7 + 3 = 10$  and  $10 - 3 = 7$  use the same numbers, so they are related addition and subtraction facts. They show what Kim did.

The number added and the number being taken away are the same. Drawing a model and using household objects can reinforce understanding. Have your child act out joining a group of 7 and a group of 3. Then remove 3 clips from the chain. This will help your child build upon his/her understanding of addition by relating addition to subtraction.

### Example

Nick has 12 marbles. He gives some to his brother. Now Nick has 9 marbles. How many marbles does Nick give his brother?



Nick gives his brother 3 marbles.

A bar model shows that the part subtracted from the whole is the unknown part. This visual representation prevents your child from finding an answer that is greater than the whole. You may wish to draw 12 counters in the whole and then cross out 9 of these counters to represent the 9. Ask your child how many counters are left. He/she should recognize that the unknown part has a value of 3 since there are 3 counters NOT crossed out in the whole.



Help your child use the Virtual Manipulatives, such as Counters and Connecting Cubes, to model the problems in this chapter.  
[SadlierConnect.com/sadliermath](http://SadlierConnect.com/sadliermath)

## Words to Know

In Chapter 2, your child is learning the following math words and strategies. Have your child use connecting cubes and/or bar models to show and explain the related addition and subtraction facts within 20 while using vocabulary from this chapter. You can review the lesson or visit [SadlierConnect.com/sadliermath](http://SadlierConnect.com/sadliermath) to access the Audio/Visual Glossary under Games and Study Aids to check your child's understanding.

Math Words or STRATEGIES	LESSON
subtract	2-1
take apart	2-2
compare	2-3
difference	2-4
related subtraction facts	2-5
related addition and subtraction facts	2-6
fact family	2-7
related addition facts	2-8
related facts	2-9
bar models, subtraction equation, unknown	2-10
work backward	2-12

## Write About It

In each lesson, the Write About It feature requires your child to reflect on and explain his/her understanding of the lesson's learning objective. Encourage your child to use math vocabulary as often as possible when writing his/her response.

Here is a sample question similar to one from Lesson 8.

Sophie baked 12 muffins. Then her family ate 5 muffins. How many muffins are left? How can you subtract and write the related addition fact?

I can subtract by using a bar model to find  $12 - 5 = 7$ . The related addition fact is  $7 + 5 = 12$ . There are 7 muffins left.

This sample answer indicates which strategy was used, using the vocabulary words *bar model* and an understanding of the *related addition fact*.

## Math Is Fun

Show your child how math can be fun and part of everyday life.

Create a three-dimensional bar model by using a shoebox, cake pan, cookie sheet, or similar rectangular container. Use tape or cardboard dividers to create the whole and two parts of the model. Use small household objects, such as coins, to create subtraction problems. Have your child find the unknown part of the bar model. Then have your child verify his/her answer by counting the total number of objects in the two parts and comparing it to the number of objects in the whole.

