Grade 2	Lesson: 1-3	
Math Standard(s): 2.OA .1	**Domain:** Operations and Algebraic Thinking	

Content Objective(s):	Language Objective(s):
Students will solve problems by writing subtraction number sentences. 我可以写出减法算式来解答问题。	Students will speak the words minus, still have, whole, and missing part when making subtraction sentences. 当我在写出减法算式时，我可以说出"减"，"还剩下"，"全部" 和 "未知的部分"。
Essential Understanding: Subtraction number sentences can be used to show separating parts from a whole or comparison subtraction situations.	**Academic Vocabulary for Word Wall:** **Listen:** 减法算式，未知的部分，减 **Read:** **Write:** **Speak:** 减法算式，未知的部分，减 **Sentence Frame:** ___减____等于_____.
Materials: • **Part-part-whole Mat (teaching tool 4)** • **Connecting cubes (Teaching tool 1)** • **Paper bags for each child** • **Guided Practice Page**	**Additional Lesson Vocabulary:** Sentence Frame: _____个还在_____里。
Lesson: Writing subtraction number sentences	**Instructional Time: 40 mins**

Prepare paper bags with 8 cubes in each for every child.

Opening: (3 minutes)

T: **"You already know how to use** <u>**addition**</u> **number sentences to show parts and the whole.** Use arms to make a + sign, emphasize addition.

Today, you will learn how to use <u>**subtraction**</u> (use arms to make a minus sign) **number sentences to find the missing part of a whole.**

"This morning I saw 5 rabbits in my backyard. Show 5 fingers. **Then some of the rabbits went into their hole.** Put 2 fingers down. **"Out of the five rabbits, I could only see 3 left. How many rabbits went in the hole?"**

Introduction to New Material (Direct Instruction): (8 minutes)

Write 5-3=2 on the board.

T: This is a subtraction sentence.

Circle the – sign, and point to it. Make the same sign with your arm.

T: "This is how we write "minus". Can you make this sign with your arm, like this, and say with me "Minus"

S: will hold their fore-arm parallel to the ground and say "minus"

T: This sign tells us that one of the parts, 3, is being taken away from the whole, 5. When you subtract, you find the missing part.

"We're going to play a game now to help us practice. I'm going to give you each a bag. When you get yours, leave it on the desk with your hands in your lap until I finish the instructions."

Choose two students to help pass out paper bags and part-part –whole mats

"There are 8 cubes in each bag. Open up your bag and take two cubes out. "

S: open bags, remove two of the cubes

T: "How can you use the mat to show how many cubes are still in the bag? And what number would you write at the top of the mat? I will give you 30 seconds to think, then when I clap my hands, please share with the person across from you how you did it."

S: will use cubes and think of a way to show. Then explain to a partner how they did it.

T: "What is the "whole" we are working with. Think how many cubes were in the bag to start with. Show me with your fingers."

S: will hold up 8 fingers

T: "Then we took out 2 cubes. So what do we need to find?"

S: the missing part, the cubes still in the bag, the other part.

T: "So let's write what we know already. We know 8 is the whole, so write 8 in the whole box at the top of the mat."

S: will write 8 at the top

T: "Now lets put two cubes on one side of the mat. 2 is one of the parts. The missing part is the number of cubes still in the bag.

Dump out the rest of the cubes and put them in the other "part" box. How many are there? On the count of three, whisper the answer to me."

S: will place the cubes in the empty space, count them, and whisper how many when given the signal

T: "The mat can help us know what number is the whole, and then find the missing part. We can write what we just did in a subtraction sentence."

Write 8-2=6 and '8 minus 2 is 6' on the board.

T: "The whole always goes first, then we write minus a part equals the other part" Or the whole minus a part is the other part.

Guided Practice: (10 minutes)

T: **"You are now going to work in partners to do a few more in this same way. Please use your bags, cubes, and workmats to find the whole, one part, and the missing part. One partner will close their eyes and take a few cubes out of the bag. The other will ask "How many cubes are still in the bag?" Then work together to find the answer. The whole will always be 8, since you all have 8 cubes in your bag. You will have 5 minutes. Start!"**

S : will practice in partners while the Teacher walks around the room watching their work. Check to make sure they are saying: **"How many cubes are still in the bag?"**

T: Give attention signal.

"Great work! Please open to page 11. You can see a giant bag on the top and then three math sentences below. Let's write the problem we solved together for number one. So I need to first write the whole, 8, in the first space. Then we took away 2, so let's write that in the next space. And our answer was 6, so we write that in the last space. When you've finished writing number one, please put your finger on your nose so I can see."

Students will follow along to write in the sentence

T: "For numbers two and three, work with your same partner, doing the same thing, but this time write the subtraction sentence. You have three minutes."

Assessment:
Homework problems 8–10 in English