Grade 2	Lesson: 1-3	3	Reference to English
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		Students will speak the words minus, still have, whole, and	
sentences.		missing part when making subtraction sentences.	
我会用减法算式来解答问题。		当我做减法算式时,我会说'减,还剩下,全部或部分'。	
Essential Understanding:		Academic Vocabulary for Word Wall:	
Subtraction number sentences can be used to show		Listen: 减法算式,未知部分,减	
separating parts from a whole or comparison subtraction		Read:	
situations.		Write:	
		Speak: 减法算式,未知部分,减	
		Sentence Frame:	
		减等于	
Materials:		Additional Lesson Vocabulary:	
Part-part-whole Mat (teaching tool 4)			
Connecting cubes (Teaching tool 1)			
Paper bags for each child			
Guided Practice Page			
Lesson: Writing subtraction number sentences Instructional Time: 40 mins			

Opening: (3 minutes)

T: "你已经学会怎么用加法算式来代表部分和全部了。今天你会学习怎么用减法算式来找出全部里的未知部分。"今天早上我在院子里看到 5 只兔子。然后有几只跑进洞里 Show 5 fingers then put 2 fingers down. "我现在还看得见 3 只。有几只兔子跑进洞里?"

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

Write 5-3=2 on the board.

T: 这个是减法算式。

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

- T: "这个符号代表"减"你可以用手比减给我看吗?
- S: will hold their fore-arm parallel to the ground and say "minus"
- T: 这个符号告诉我们要从全部减掉一个部分。当你做减法时, 你就是在找出未知的部分。
- "现在我们来玩一个游戏来帮助我们复习。我会给每个人一个袋子。"

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

- "袋子里有8个方块。请打开然后拿出两个。
- S: open bags, remove two of the cubes
- T: "你可以怎么用工作板来显示袋子里还剩下几个方块?你要在最上面写下什么数字?请告诉旁边的同学。"
- S: will use cubes and think of a way to show. Then explain to a partner how they did it.
- T: "全部是什么?袋子一开始有几个方块?用手指比给我看。"
- S: will hold up 8 fingers
- T: "我们拿出 2 个方块, 所以我们要找出什么?"
- S: the missing part, the cubes still in the bag, the other part.
- T: "所以我们来写下我们知道的。我们知道全部是 8, 所以我们会在最上面写 8。"
- S: will write 8 at the top
- T: "现在我们来把两个方块放在板子的一边。2 是一个部分。未知部分是袋子里剩下的方块。把剩下的方块拿出来然后放在另一个部分上。有几个方块?数一数然后小声地告诉我。"
- S: will place the cubes in the empty space, count them, and whisper how many when given the signal
- T: "工作板可以告诉我们全部是什么然后帮助我们找出未知的部分。我们可以用减法算式写出我们刚才做的。" Write 8-2=6 and '8 minus 2 is 6' on the board.
- T: "要写全部减一个部分等于另一个部分。

Guided Practice: (10 minutes)

- T: "现在换你跟同学联系了。请用袋子,方块和工作板来找出全部,一个部分和未知部分。一个人会从袋子里拿出几个方块,另一个学生要问"袋子里还剩下几个方块?"然后你们两个会一起合作来找出答案。全部一定都会是8。你们有5分钟来完成。"
- 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. "很好,请翻到 11 页。你会在上面看到一个很大的袋子和三个算式。我们一起在第一个写下我们解答的问题。所以我要先写全部。然后我们拿走 2 个,所以我们会把 2 写在下一个空格里。我们的答案是 6,所以我们会把它写在最后一个空格里。"

Students will follow along to write in the sentence

T: "第二和三题, 请跟你的同学写下减法算式。你们有 3 分钟的时间。"

Use the modeling cycle:

Teacher Does:

- T: "我们来看第一题。题目告诉你全部是 9 然后也给你一个部分。你需要找出未知部分并写出减法算式。我们一起来数我们看到的方块。"
- S: will count with teacher 1,2,3,4,5.
- T: "我们需要找出未知部分。如果我画一个方块会够吗?用大拇指比给我看。
- S: will respond with thumbs
- T: "我们一起来数 1,2,3,4,5,6 不够,我们再画一个方块 1,2,3,4,5,6,7. 还不够,我们再画两个方块 1,2,3,4,5,6,7,8,9. 9 个方块。未知部分是 4。写出减法算式。9 减 5 等于?如果你忘了你可以数你画的方块来找出未知的部分。"

2 Students Do with Teacher:

T: 我需要 2 个学生来帮忙。

Pick two students' names from the class jar

T: "学生 1, 全部是什么?"

If needed, guide student to find 10.

T: "所以我们要在减法算式的第一个空格里写 10。学生 2, 我们知道的部分是什么?"

Have student point as they count out loud the 7 triangles.

T: "请把 7 写在减法算式里的第二个空格里。现在你需要找出未知的部分。"

Let the two students draw the triangles on the projected page (so everyone can see).

- T: "请检查你的答案。他们画了 3 个三角形来代表未知的部分。跟我一起数看是不是正确的。"
- S: count with teacher 1,2,3,4,5,6,7,8,9,10.
- T: "对,有 10 个。"

Independent Practice: (11 minutes)

- T: "现在换你自己做第 3-7 题了。你可以用方块来帮你,但是要记得把未知部分画出来。你有 10 分钟来完成。"
- Walk around the room, watching how students are solving the problems and helping those who may need it

Closing: (5 minutes)

T: 今天你学到关于减法算式。我们会先写全部,减号,被减掉的部分,然后等号。

Write the symbols on the board, leaving a space where the numbers would go

T: 我们要找出未知部分来解答。今天做得很好。

Assessment:

Homework problems 8-10 in English