Grade 1	Lesson: 2-9 Connecting Addition and Subtraction	Reference to English
Math Standard(s): 1.0A.6		**Domain: Operations and Algebraic Thinking**
Content Objective(s):		**Language Objective(s):**
Students will write related addition and subtraction facts. **我可以写出相关的加法和减法算式。**		Students will addition and subtraction sentences. **我可以说出加法和减法算式…**
Essential Understanding: Addition and subtraction have an inverse relationship. The inverse relationship between addition and subtraction can be used to find subtraction facts; every subtraction fact has a related addition fact.		**Academic Vocabulary:** **Listen:** 一样，不一样，一共 **Read:** **Write:** **Speak:** 不一样，顺序 **Sentence Frame:**
Materials: • Two-color counters (6 per pair) • Whiteboards and dry erase markers • Guided Practice page 74-75 • Problem Solving page 76		**Language and Word Wall:** 加法，减法，减，加，等于
Lesson: Connecting Addition and Subtraction	**Instructional Time: 45 minutes**	

Opening: (4 minutes)

T: **"You have learned how to add and subtract numbers. Today, you will learn how addition and subtraction facts are related."**

- Draw a large square on the whiteboard. Draw a line down the middle of the square to divide it into two equal parts. Draw 3 counters in one box and 2 counters in the other box.
- Pass out white boards, markers and erasers.

T: **"How many counters are there in all?"**

S: will say "5".

- Write a number 5 above the two boxes on the whiteboard. Then cover the group of 3 counters

T: **"What subtraction sentence could you write? Please write it on your board."**

S: will write, "5 – 2 = 3".

T: **"Now, say the subtraction sentence with me."**

S: will say "5 – 2 = 3".

- After the children have helped you write a subtraction sentence, reveal the hidden counters to check the answer.

Introduction to New Material (Direct Instruction): (10 minutes)

- Distribute the counters to the children.

T: **"I am going to add one more counter to the box that has 3 counters."**

- Draw 1 more counter on the model on the board, so that it shows 4 counters on one side and 2 counters on the other side.
- Have the students model the picture on the board with their counters.

T: **"I wan you to draw the two boxes on your board. Put the same number of counters in the boxes, like I did."**

S: will draw the two boxes and put counters in each box to match the one on the board.

T: **"How many counters do I have in this box now?"**

S: will say "4".

- Write a number 6 above the two boxes on the whiteboard.

T: **"What addition sentence could you write for these counters? Please write it and then share it with your neighbor."**

S: will write and say "4 + 2 = 6" to their neighbor.

T: **"Read the addition sentence with me."**

S: will say "4 plus 2 equals 6."

T: **"Cover the 2 counter on the model."**

- Cover the 2 counters on the models on the whiteboard.
- Have the students cover the group of 2 counters on their model.

T: **"What subtraction sentence does this make? Write it down and tell your neighbor."**

S: will write and say "6 – 4 = 2" to their neighbor.

T: **"Now cover the 4 counters on the model."**

- Cover the 4 counters on the models on the whiteboard.
- Have the students cover the group of 4 counters on their model.

T: **"What subtraction sentence does this make? Write it and tell your neighbor."**

S: will write and say "6 – 2 = 4"to their neighbor.

T: **"Look at the subtraction sentences. Look at the addition sentences. How are they the same?"**

S: will say, "same numbers."

T: **"How are the sentences different from each other?"**

S: will say "numbers in different order" or "plus or minus signs"

Guided Practice: (15 minutes)

Use the modeling cycle:

Teacher Does:

T: **"Let's look at another problem. I am going to draw 1 counter in the first box. You do the same."**

- Draw 1 counter in the first box on the whiteboard.
- Have the students model the picture on the whiteboard with their counters.

T: **"I am going to draw 6 counters in the second box. How many counters are in the second box?"**

S: will say "6".

T: **"Good, you draw 6 counters in the second box too."**

T: **"How many counters are in the two boxes altogether? Tell your neighbor."**

S: will say to their neighbor, "7"

- Write a number 7 above the two boxes on the whiteboard.

Assessment:
Guided Practice