Grade 1	Lesson: 4-9 Thinking Addition to 12 to Subtract	Reference to English

Math Standard(s): 1.0A.4, 1.0A.6, & 1.0A.8 **Domain: Operations and Algebraic Thinking**

Content Objective(s):	Language Objective(s):
Students will write related addition and subtraction facts to 12. 我会写到12的相关加法和减法算式。	Students will say numbers 1-12 while using addition facts to find the related subtraction facts. 我用加法算式来找出减法算式时会说1 - 12的数字。
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 for Word Wall:** **Listen:** 减法，减，差 **Read:** 加法，减法 **Write:** **Speak:** 减法，减
Materials: • **Counters (12 per pair)** • **Number Cubes (2 per pair; one with the numbers 1-6, one with numbers 7-12).** • **Cups (1 per pair)** • **Whiteboards and dry erase markers** • **Guided Practice page 150-151** • **Problem Solving page 152**	**Language and Word Wall:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 加法，加，等于，总和，减法，减，差

Lesson: Thinking Addition to 12 to Subtract **Instructional Time: 35 minutes**

Opening: (2 minutes)
T: “你已经学会怎么用加法算式来帮助你做减法。今天你会继续练习。从你12支蜡笔的盒子里拿出4支。盒子里还有几支蜡笔？”
S: will say “8”.
T: “你可以怎么用加法来找出答案？”
S: will say “there are 8 left in the box. I know that because 4 and 8 makes 12.”
T: “这个的加法算式是什么？”
S: will say “4 + 8 = 12.”

Introduction to New Material (Direct Instruction): (6 minutes)
•Distribute the counters, whiteboards, and dry erase markers to the students.
•Draw a large rectangle on the whiteboard. Draw a vertical line down the center of the rectangle. So, there are now two parts to the rectangle.
•The teacher will write 11 – 5 = ____ on the whiteboard above the rectangle.
T: “这题的减法算式是什么？告诉你旁边的同学然后写在你的白板上。”
S: will say “11 – 5 = ____.”
T: “你可以怎么用标记物和加法算式来解答？”
•The teacher will draw for counters (circles) in the box on the left.
T: “你知道全部是11然后一个部分是5。你还需要几个标记物才会有11？用手指比给我看。”
S: will show “6”.
•The teacher will write a 6 as the difference for 11 – 5.
T: “所以未知的部分是 6。”
•The teacher will draw 6 circles (counters) in the box on the right.
•Have the students put 6 counters to the right of their 5 counters.
T: “你可以用这些标记物表示什么加法算式？”
S: will say “5 + 6 = 11”.
•The teacher will write the number sentence 5 + 6 = 11 on the whiteboard.

Guided Practice: (15 minutes)
Use the modeling cycle:
Teacher Does:
•Draw a large rectangle on the whiteboard. Draw a vertical line down the center of the rectangle. So, there are now two parts to the rectangle.
T: “我需要数字方块，标记物和杯子来做这个活动。我的一个数字方块上有7 – 12的数字。我会丢数字方块然后把一样多的标记物放在杯子里。我得到_____，所以我要把_____个标记物放在杯子里。”
•The teacher will toss the number cube and place the correct number of counters in the cup.
T: “另一个数字方块上有1 – 6的数字。我会丢数字方块然后把一样多的标记物放在杯子里。 我得到_____，所以我要把_____个标记物放在杯子里。 我会把从杯子里拿出来的标记物放在左边的盒子里。”
•The teacher will toss the number cube and take the correct number of counters out of the cup.
T: “这些标记物的加法算式是什么？”
S: will say ____ + ____ = ____
•The teacher records this addition sentence on the whiteboard.
T: “现在我要未知这些标记物写一个减法算式。要记得减法算式里的第一个减数是全部。你丢的第一个数字方块的数字是什么？”
S: will say “____”.
T: “我从杯子里拿出来几个方块？”
S: will say “___”.
T: “所以我有 ____ – ____。现在我们要找出差。_____减_____是什么？”
S: will say “____”.
T: “杯子里还有几个标记物？”
S: will say “____”.
T: “等号之后的数字应该跟杯子里剩下的标记物是一样的。”

Students Do with Teacher:
•Draw a large rectangle on the whiteboard. Draw a vertical line down the center of the rectangle. So, there are now two parts to the rectangle.
T: “我需要一个学生来帮我。”
•Pick a student to come up and demonstrate the activity with the teacher.
T: “我需要数字方块，标记物和杯子来做这个活动。 我的一个数字方块上有7 – 12的数字。我会丢数字方块然后把一样多的标记物放在杯子里。我得到_____，所以我要把_____个标记物放在杯子里。”
•The teacher will toss the number cube and place the correct number of counters in the cup.

Assessment:
Guided Practice