

Grade 2	Lesson: 8-8 Ways to Add	Reference to English
Math Standard(s): 2.NBT.5 (also 2.NBT.6 and 2.NBT.9)		Domain: Number and Operations in Base Ten
Content Objective(s):		Language Objective(s):
Students will use different methods to help them solve addition problems. <i>我会用不同方式来解答加法问题。</i>		Students will teach how to add two-digit numbers to others. <i>我会教别人怎么相加二位数字。</i>
Essential Understanding: All sums and differences can be found using models (cubes). Some calculations are done easily using mental math or paper and pencil. More complex calculations can be done using a calculator.		Required Academic Vocabulary for Word Wall: Listen: 数字线 Read: Write: Speak: Sentence Frame:
Materials: <ul style="list-style-type: none"> Number cards with a set of two-digit numbers on each (ie:56 and 32) Manipulatives used for adding Connecting Cubes (or Teaching Tool 1) Adding More than Two Numbers (page 241) Guided Practice (page 242) 		Additional Lesson Vocabulary:
Lesson:		Instructional Time: 40 minutes
Opening: (1 minutes) <ul style="list-style-type: none"> Hand out whiteboards, markers and erasers. <p>T: “你已经学会怎么用心算，方块，纸跟笔和计数机做加法了。今天你会练习选一个方式来解答加法问题。”</p> <p>T: “我会在白板上写下 4 个题目。”</p> <ul style="list-style-type: none"> Write 4 different addition problems on the board. <ul style="list-style-type: none"> $9 + 2 = \underline{\quad}$ $8 + 9 = \underline{\quad}$ $25 + 21 = \underline{\quad}$ $15 + 12 = \underline{\quad}$ Introduction to New Material (Direct Instruction): (7 minutes) <p>T: “我们会用不同的方式来解答每一题。请把第一个问题写在白板上。”</p> <p>S: <i>will write $9 + 2 = \underline{\quad}$ on their board.</i></p> <p>T: “你可以用哪个方式来做 9 加 2？”</p> <p>S: <i>will respond, “make 10” or “count by 2”</i></p> <p>T: “我们来凑成 10, 9 还需要几个才能凑成 10？”</p> <p>S: <i>will respond, “we need 1.”</i></p> <p>T: “对，我们还需要 1, 所以我们会从 2 拿 1 出来。 (show how you take one on the board) 给我看你的白板。”</p> <p>S: <i>will show the work they have done on their boards to the teacher.</i></p> <p>T: “现在我有 10 加 1, 找出答案。”</p> <p>S: <i>will add 10 plus 1, write it on their board and show the teacher.</i></p> <p>T: “给我看你的白板。很好，9 加 2 等于 11. 把加法算式念给你旁边的同学听。=”</p> <p>S: <i>will say, “9 plus 2 equals 11” to their neighbor.</i></p> <p>T: “现在我们来做下一题，但是我们会用另一个方式。你可以用数字线，心算，纸跟笔…除了凑成 10 的方式以外，什么方式都可以。”</p> <p>S: <i>will add $8 + 9$ using a method other than making 10.</i></p> <p>T: “给我看你的白板。我会请两个学生上来告诉我们他们怎么解答 $8 + 9 = \underline{\quad}$ 的。”</p> <ul style="list-style-type: none"> Teacher will call on two students to explain how they solved the problem. Teacher will scaffold the language as needed by the students. <p>S: <i>will demonstrate and explain how they added $8 + 9 = \underline{\quad}$.</i></p> <ul style="list-style-type: none"> <i>“I used a number line. First I started at 0 counted to 8. I drew an arrow. Then I started at 8 and counted 9 more and wrote an arrow until I hit 17. $8 + 9$ equals 17.”</i> <i>“I counted on. I started with 8 and count up 9 using a hundred chart. 8,9,10,11,12,13,14,15,16,17. $8 + 9$ equals 17.”</i> <p>T: “很好，他们用了不同的方式解答 8 加 9, 但是他们的答案是一样的。”</p> <ul style="list-style-type: none"> Continue with the last 2 problems the same as the 2nd. 		

Guided Practice: (12 minutes)

Use the modeling cycle:

Teacher Does:

- Write sentence frames on the board to help the students know what to say.
- Write/ draw methods on the board to show students different methods they can use to add.
- Have manipulatives (tens rods, connecting cubes) available for the students to use.

T: “现在换你个同学练习了。你们会拿到一叠卡，每张卡上都有一组二位数字。一个学生会选卡然后另一个会选择要用什么方式来相加。”

T: “我来示范给你看。”

- 1st 我会选一张卡。我的卡上有 24 和 14，我需要相加。
- 2nd 我会把数字写在加法框里。
- 3rd 我会决定用什么方式来相加。我选择用十的棒子和方块来凑成十。
- 4th 我会先加十位数：2 加 1 等于 3。我有 3 个十。
- 5th 我会加个位数：4 加 4 等于 8，我有 8 个一。
- 6th 我会把十位数和个位数合起来。我有 3 个十和 8 个一，所以是 38。
- 7th 我会把 38 写在加法框的下面。”

1 Students Does with Teacher:

T: “我需要 1 个学生来帮我。”

- Teacher will choose a student.

T: “我们是一队，我来选一张卡然后你写下来并教我们怎么解答这个加法问题。”

- Teacher will choose a card.

S: will say, “the numbers are ____ and ____ . I will write them.”

T: “很好，你要怎么做 ____ 加 ____?”

S: will choose a method to add the two numbers.

T: “好，现在我来教你怎么用那个方式来做 ____ + ____”

S: will teach the class how to add ____ + ____ using the specified method.

- “1st I add the ones.
- 2nd I add the tens.
- 3rd I write the answer.”

T: “很好，他们用了 ____ 的方式。请回座位。”

S: will say, “we add the ones first.”

T: “好，你先加个位数然后我再加十位数。”

S: will add the ones and write the answer, they will regroup if necessary.

T: “很好，我来加十位数。”

- Teacher will add the tens.

T: “你可以把加法算式念出来吗？”

S: will read the addition sentence, ____ + ____ + ____ = ____

T: “谢谢你的帮忙，请回座位。”

All Students Do:

- Write 4 addition problems on the board.
 - $74 + 12$
 - $29 + 36$
 - $30 + 27$
 - $45 + 46$

T: “现在换你了。白板上 4 个题目，每组需要做 2 题。”

S: will do the activity.

- Teacher will walk around the room helping students and reminding them to use the language as they work together.

T: “10, 9, 8, 7, 6, 5, 4, 3, 2, 1. 时间到，请把连接方块收起来，把纸交给我，然后回到地上的座位。”

S: will clean up their activity, turn in their papers and sit on the carpet.

Independent Practice: (6 minutes)

T: “现在换你自己做了。我们先一起来做第一题。”

- Write $56 + 20 =$ ____ on the board.

T: “我在白板上写了一个题目，请你们写下来。”

S: will write $56 + 20 +$ ____ on their boards.

T: “我们来用心算来解答 56 加 20. 你要怎么解答？我会在头脑里做加法。5 个十加 2 个十等于 7 个十 (have tens rods there to demonstrate to make it visual)”

T: “然后呢？”

S: *will respond, “add the ones.”*

T: “6 加 0 等于 6. 我来把答案写在白板上。”

S: *will write the answer on their board.*

T: “把加法算式念给你的同学听。”

S: *will read, “56 plus 20 equals 76.”*

T: “很好，现在你有 5 分钟来完成剩下的题目。”

- Teacher will pass out the papers and the students will work at their desks.
- Teacher will walk around the room monitoring and helping students.

T: “10, 9, 8, 7, 6, 5, 4, 3, 2, 1. 时间到，请把纸交给我，然后回到地上的座位。”

S: *will turn in their papers and sit on the carpet.*

Closing: (4 minutes)

- Pass out whiteboards, erasers and markers.

T: “最后我们来做一个应用题。Jamie 去看鸟。他看到 31 只麻雀和 15 只冠蓝鸦。他一共看到几只鸟？请把加法问题写在白板上。”

- Teacher and student will write $31 + 15 = \underline{\quad}$ on their boards.

T: “我们要用学过的方式来解答这个问题。”

S: *will solve the problem using one of the methods.*

T: “给我看你的白板。”

S: *will show the teacher their boards.*

T: “很好，我要 2 个学生上来教我们怎么解答。”

- Teacher will choose two students to come up and teach how to add $31 + 15$.

S: *will teach the class how solve $31 + 15$ using one of the methods.*

- 1st _____
- 2nd _____
- 3rd _____
- 4th _____.

T: “很好，谢谢你。”

Assessment:

Guided Practice