Grade 2	Lesson: 8-2 Models to Add Two- and One-Digit Numbers	Reference to English

Math Standard(s): 2.NBT.5 (also 2.NBT.9)	Domain: Number and Operations in Base Ten

Content Objective(s):	Language Objective(s):
Students will use concrete models to add a one-digit number to a two-digit number and decide if regrouping is needed. *我会做一位数字和二位数字相加的加法并决定需要还是不需要进位。*	Students will say "ones place" or "tens place." 我会说'个位数'或'十位数'
Essential Understanding: The standard addition algorithm for two-digit and one-digit numbers breaks the calculation into simpler calculations using place value, starting with the ones place and then the tens. Answers to the simpler calculations are used to give the final sum.	**Required Academic Vocabulary for Word Wall:** **Listen:** **Read:** **Write:** **Speak:** 个位数，十位数 **Sentence Frame:**
Materials: • Place – Value Mat A (Teaching Tool 8) • Number cards 0-11 (Teaching Tool 2) • Connecting Cubes (or teaching tool 1) • Whiteboards, erases and markers. • Models to Add Two- and One-Digit Numbers (page 217) • Guided Practice (page 218)	**Additional Lesson Vocabulary:** 花

Lesson:	Instructional Time: 40 minutes

Opening: (3 minutes)
- Have 32 + 4 = ___ written on the board.
- Have 32 connecting cubes together and 4 loose cubes ready to add.

T: "你已经学会怎么用连接方块来做一位数和二位数相加的加法了。我们一起来做一题。"

T: "看白板，跟我一起念出题目 **32 + 4 = ____**。"

S: *will read, "32 plus 4 equals ___ " with the teacher.*

T: "告诉你旁边的同学这 **32** 个方块要做什么。"

S: *will turn to their neighbor and say, "makes tens."*

T: "我要先凑成十。**32** 里有几个十？用手指比给我看。"

S: *will show 3 with their fingers.*

T: "这里有 **3** 组 **10**。**10, 20, 30.** 告诉你旁边的同学还剩下几个一。"

S: *will turn to their neighbor and say, "2 ones left."*

T: "我还剩下 **2** 个一然后我要再加 **4** 个一。**2** 加 **4** 等于 ___? 大家一起说。"

S: *will say "6" as a class.*

T: "很好， **2** 加 **4** 是 **6.** 现在我们把十位数和个位数加在一起。**3** 个十或 **30** 加 **6** 等于 **36.** 我来写在白板上。请把加法算式念给你旁边的 同学听。"

S: *will read, "32 plus 4 equals 36" to their neighbor.*

T: "今天你会学习怎么用二位数加法框来写下你怎么做加法的。"

Introduction to New Material (Direct Instruction): (7 minutes)
- Draw a two-digit addition frame on the board (look at page 217 for an example).
- Distribute connecting cubes to pairs of students.
- Write 16 + 8 on the board.

T: "看白板上的题目。**16** 加 **8.** 我们来用方块相加两个数字。**16** 可以做出几组 **10**？"

S: *will respond, "1."*

T: "请做出一组十。"

S: *will make one group of ten.*

T: "还剩下几个？用手指比给我看。"

S: *will show 6 fingers.*

T: "对，你还剩下 **6** 个一。请做 **6** 个方块加 **8** 个方块。你可以组成十吗？"

S: *will respond, "yes" or "no."*

T: "你可以组成一个十。"

S: *will make another group of ten.*

T: "你有几个十？跟我一起数。"

S: *will count, "10, 20" or "1, 2."*

T: "没错，你有 **2** 组十和几个一？"

S: *will respond, "4."*

T: "我们一起数。 **10, 20, 21, 22, 23, 24. 24** 个方块."

S: *will count with the teacher.*

T: "所以我们怎么写在白板上的加法框里？我会在加法框里写下加法算式。

- Write 16 + 8 in the addition frame on the board.

T: "我们用加法框做加法时，我们要先加个位数。个位数在右边。"

- Point out the ones place on the addition frame.

T: "**6** 加 **8** 是什么？用连接方块来帮忙。你有几个十和几个一？"

S: *will work together to show 1 tens and 4 ones.*

T: "我们有 **1** 个十和 **4** 个一。我来把 **4** 写在个位数的位置。"

- Write 4 in the ones place on the addition frame, also put the loose cubes under the ones.

T: "我还有一个十，我会把它放在十位数上面的格子里。"

- Write one in the box above the tens and put the group of ten below the tens place.

T: "**1** 加 **1** 是什么？用手指比给我看。"

S: *will show 2 with their fingers.*

T: 很好，我们要进位吗？"

S: *will respond, "yes."*

T: "对，我们要进位。"

Guided Practice: (12 minutes)

Use the modeling cycle:

Teacher Does:

T: "现在换你和同学练习了。我先来示范给你看。"

T: "我会现在白板上写下加法框。"

- Write an addition frame on the board.

T: "然后我会选一个在 **25－29** 之间的数字。我选 **26.**"

- Write 26 in the addition frame.

T: "现在我会选一张卡。我选到 **7.**"

- Write 7 below the 6 in the addition frame.

T: "现在我们要做 **26** 加 **7**。我要从哪里开始？个位数还是十位数？"

- Point at the ones place and the tens place as your ask the students.

S: *will respond, "ones place" or "tens place."*

T: "我们要从个位数开始。**7** 加 **6** 是什么？跟你的同学合作来找出答案。你可以用连接方块来帮助你。"

S: *will work together to add 7 plus 6."*

T: "**7** 加 **6** 是什么？用连接方块来做出十。我做出一组十了。我还剩下几个一？用手指比给我看。"

S: *will show 3 with their fingers.*

T: "我有 **3** 个一，我会把它写在个位数下面。"

- Write 3 in the correct spot in the ones column and put the loose cubes under the ones column.

T: "我会组成一个十。我会在十位数上的格子里写一。**1** 加 **2** 是什么？"

S: *will respond, "3."*

T: "对，一加二是三。我们一起念出题目。**26** 加 **7** 等于 **33.**"

S: *will read, "26 plus 7 equals 33."*

1 Students Does With Teacher:

T: "我需要 **1** 个学生来帮忙。"

- Teacher will choose a student.

T: "我需要你帮我做下一题。你选一个在 **25** 和 **29** 之间的数字然后写在加法框里。"

S: *will choose a number between 25 – 29 and write it in the addition frame.*

T: "很好，现在选一张卡然后把数字写在加法算式里。"

- Write the number in the ones place.

T: "我们需要相加。我要从哪里开始？个位数还是十位数？"

S: *will respond, "ones place"*

T: "我们一起来做加法。我们可以用连接方块。

- Teacher and student work together to add.

T: "我们来加个位数。"
- Student and teacher will add the ones.

T: "现在我们来加十位数。"
- Student and teacher will add the tens.

T: 很好，跟我一起念出加法算式。"

S: *will read the addition sentence with the teacher.*

T: "谢谢你的帮忙，请回座位。"

<u>2 Students Do:</u>

T: "我需要 **2** 个学生来帮忙。"
- Teacher will choose two students to come up and help.

T: "请为我们示范。学生 **1** 要选一个在 **25** 和 **29** 之间的数字然后写在白板上的加法框里。"

S: *#1 will write a number between 25 -29 on the addition frame on the board.*

T: "学生 **2** 要选一张卡然后写在加法框里。"

S: *will pick a card and write the number on the addition frame on the board.*

T: "现在呢？我们要先加个位数还是十位数？"

S: *will respond, "the ones."*

- Students will continue to solve the problem.

T: "谢谢你的帮忙，请回座位。"

<u>All Students Do:</u>

T: "现在换你了。你们会拿到一张纸和一叠卡。你们有 **6** 分钟来完成 **3** 题。"

S: *will do the activity.*

- Teacher will walk around the room helping and guiding groups as needed.

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。"

- Collect the papers.

Independent Practice: (10 minutes)

T: "现在换你自己做了。我们先一起做第一题然后剩下的换你做。"

T: "白板上有一个题目，**57** 加 **7** 等于什么？我们要先加个位数还是十位数？"

S: *will respond, "the ones."*

T: "对，我们要先加个位数。**7** 加 **7** 等于什么？"

- Teacher will use the connecting cubes.

T: "如果你知道 **7** 加 **7** 是什么，请举手。"

S: *raise their hands and say "7 plus 7 equals 14."*

T: "我们可以用 **14** 组成几个 **10**？"

S: *will shout out, "1."*

T: "我们另外还有几个一？"

S: *will respond, "4."*

T: "所以，我们要在个位数上写下 **4** 然后把十移到十位数上的格子里。"

- Write 4 in ones and the ten in the box above the tens.

T: "**1** 加 **5** 等于什么？用手指比给我看。"

S: *will show 6."*

T: "很好，把加法算式念给你旁边的同学听。"

S: *will read, "57 plus 7 equals 64" to their neighbor.*

T: "我们需要进位吗？用大拇指比给我看。"

S: *will show thumbs up.*

T: "我们需要进位。现在换你做剩下的题目了。你有 **8** 分钟来完成。"

S: *will work on the rest of the problems.*

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。"

- Collect the papers.

Closing: (8 minutes)

- Pass out whiteboards, erases and markers.

T: "我们最后来做一个应用题。我念出来然后你把资料写在白板上。现在白板上画一个加法框。"

S: *will write an addition frame on their board.*

T: "有 **32** 朵白色的花。写下 **32** 然后给我看。"

S: *will write 32 on their addition frame and show the teacher.*

T: "有 **4** 朵粉红色的花。把 **4** 写下来然后给我看。"

S: *will write 4 on their addition frame and show the teacher.*

T: "一共有几朵花？找出答案。"

S: *will find the answer.*

T: "给我看你的白板。很好，**32** 加 **4.** 我要先加个位数 **2** 加 **4** 等于 **6.** 我来写在加法框里。"

•   Write 6 at the bottom of the ones column.

T: "**3** 加 **0** 等于 **3**，我来把它写在十位数上。"

•   Write 3 at the bottom the tens column.

T: "你的答案跟我的一样吗？给我看你的白板。"

S: *will show the teacher their boards.*

T: "今天做得很好。"

Assessment:

Guided Practice