Grade 2	Lesson: 8-6		Reference to English
	Adding on a Number Line		
Math Standard(s): 2.MD. (also 2.NBT.6 and 2.NBT.9)  Domain: Number and Operations in Base Ten			
Content Objective(s):		Language Objective(s):	
Students will use number lines to model two-digit addition.		Students will tell their neighbor how many more they need.	
我会用数字线来标示出二位数字的加法。		我会告诉我旁边的同学我还需要几个。	
Essential Understanding:		Required Academic Vocabulary for Word Wall:	
Sums can be represented as lengths on a number line diagram		Listen: 数字线	
of addition.		Read:	
		Write:	
		Speak:	
		Sentence Frame:	
Materials:		Additional Lesson Vocabulary:	
Guided Practice (page 234)		积木,箭头	
Independent Practice (page 235)			
Lesson:		Instructional Time: 40 minutes	

## Opening: (1 minutes)

- Draw a number line from 0 30 (label multiples of 5) on the board.
- T: "你已经学会怎么用模型来做 2 个二位数的加法了。今天你会学习怎么用数字线来做一位数和二位数相加的加法。"

# Introduction to New Material (Direct Instruction): (7 minutes)

- T: "我来告诉你们一个应用题。Ameilia 星期一走了 18 个街区。"
- Write Monday and 18 blocks next to it on the board.
- T: "星期二她走了 5 个街区。"
- Write Tuesday and 5 blocks next to it on the board.
- T: "她一共走了几个街区?"
- Use the number line you have already written on the board.
- T: "看白板上的数字线,每个刻度等于一个街区。我需要一个学生上来帮我把 18 圈起来。"
- Teacher will choose a student.
- S: will find 18 on the number line and circle it.
- T: "我们来 5 个一数来检查, 跟我一起数 5, 10, 15, 16,17,18. 没错, 我会从 0 画一个箭头到 18."
- S: will count with the teacher.
- T: "她星期二又走了 5 个街区,所以我们再来加 5 个。我会从 18 开始然后往前数 5, 1,2,3,4,5. 我会再画一个箭头。
- Teacher will draw another arrow from 18 to 23.
- T: "看数字线和上面的箭头。第二个箭头停在哪里?"
- S: will respond, "stops on 23."
- T: "对, 停在 23 上, 所以 18 加 5 等于 23. Amelia 一共走了几个街区?告诉你旁边的同学。"
- S: will turn to their neighbor and say, "23 blocks."

#### Practice: (10 minutes)

- Have a large number line on the board to work with.
- T: 今天我们要一起练习。
- Teacher will hand out the papers and send the students to their desks.
- T: "我们一题一题来做。我们先来看第一题。"
- Write the equation on the board 21 + 7 =
- T: "我们需要用数字线来找出 21 加 7. 我要从哪个数字开始?告诉你旁边的同学然后把数字圈起来。"
- S: will tell their neighbor, "21" and circle it on their paper.
- T: "给我看你的纸。"
- S: will show the teacher their papers.
- T: "很好, 你把 21 圈起来了。"
- Teacher will circle 21 on the number line on the board.
- T: "现在我们要从 0 画一个箭头到 21."
- S: will draw an arrow from 0 to 21.
- T: "21 加 7, 所以现在我们要加 7. 我们要从哪里开始?"
- S: will respond, "at 21."

- T: "对, 我们要从 21 开始。我们从 21 往前数 7, 1,2,3,4,5,6,7."
- S: will count with the teacher.
- T: "很好, 现在我们在哪个数字上?"
- S: will respond, "28."
- T: "对, 所以要从 21 画一个箭头到 28."
- S: will draw an arrow from 21 28.
- T: "请把加法算式念给你旁边的同学听。"
- S: will turn to their neighbor and say, "21 plus 7 equals 28."
- T: "很好, 我们来做下一体。"
- Write 14 + 9 = \_\_\_ on the board.
- T: "14加9等于 \_\_\_\_. 我们要从哪个数字开始?"
- S: will respond, "14."
- T: "没错, 在数字线上找出 14."
- S: will find 14.
- T: "现在要做什么?"
- S: will answer, "draw an arrow."
- T: "对, 画一个箭头。"
- S: will draw and arrow from 0-14.
- T: "给我看你的纸。"
- S: will show the teacher their papers.
- T: "接下来呢?"
- S: will respond, "add 9."
- T: "我们从 14 开始往前数 9. 跟你的同学一起数然后画出箭头。"
- S: will count on from 14 to 23 with their neighbor and draw the  $2^{nd}$  arrow.
- T: "现在你在哪个数字上?"
- S: will respond, "23."
- T: "把算式念给你旁边的同学听。"
- S: will read "14 + 9 = 23" to their neighbor.
- T: "我们一起念出加法算式, 14 加 9 等于 23."
- T: "请自己做第 4 题。"
- S: will complete number 4, 16 + 5 + \_\_\_\_ independently.
- T: "把纸拿起来。 (Check student work if most got it correct, move on, if most did not, go over problem.)

### Closing: (5 minutes)

- T: "我们最后要再做一题。这次要从数字线上找出资料来解答加法算式。"
- Draw the number line on the board and write 7 + 12 using arrows and circles.
- T: "跟你的同学合作来找出加法算式。你有 1 分钟的时间。"
- S: will work together to figure out the addition sentence.
- T: "5, 4,3,2,1. 时间到。看第 3 题。看这个紫色的箭头,它是从 0 到什么数字?"
- S: will respond, "7."
- T: "没错,它从0到7,所以我会在第一个空格里写下7.
- Teacher will write 7 on the first blank in the addition sentence.
- T: "看第二个箭头,它有多场?跟我一起数 1,2,3,4,5,6,7,8,9,10,11,12. 它从 7 一直到 19, 这之间有 12 个刻度。我会在第二个空格里写下 12."
- Teacher will write 12 on the second blank in the addition sentence.
- T: "你的加法算式跟我的一样吗?"
- S: will check their addition sentence.
- T: "跟我一起念出算式, 7加 12等于···告诉你旁边的同学答案是什么。"
- S: will turn to their neighbor and say, "19."
- T: "再跟我说一次加法算式, 7加 12 等于 19."
- S: will say with the teacher, "7 plus 12 equals 19."
- T: "请再自己做一题。你有1分钟来完成第6题。"
- S: will work on problem 6.
- Check student work and go over problem 6 if the students need to help.
- T: "很好。"

#### Assessment:

**Guided Practice** 

