

| Grade 2 | Lesson: 8-5 Adding Two-Digit Numbers | 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 the standard algorithm symbolically to add two-digit numbers, with and without regrouping. <i>I can use the standard algorithm symbolically to add two-digit numbers, with and without regrouping.</i> | | Students will say the addition sentence. <i>I can say the addition sentence.</i> |
| Essential Understanding: The standard addition algorithm for adding two-digit and two-digit is just an extension of the algorithm for adding two-digit and one-digit numbers. The ones are added first and then the tens. | | Required Academic Vocabulary for Word Wall: Listen: Read: Write: Speak: Sentence Frame: |
| Materials: <ul style="list-style-type: none">Number Cards 0-11 (Teaching Tool 2)Whiteboards, erases and markers.Models to Add Two- and One-Digit Numbers (page 225)Guided Practice (page 226) | | Additional Lesson Vocabulary: |
| Lesson: | | Instructional Time: 40 minutes |
| Opening: (3 minutes) <ul style="list-style-type: none"> Draw an addition frame on the board. Use connecting cubes as you demonstrate 22 plus 29. Pass out whiteboards, markers and erasers. T: "You have learned how to use models to add 2 two-digit numbers. Let's do one together." T: "I have written an addition frame on the board. Please do the same on your board." <i>S: will write an addition frame on their board.</i> T: "Please fill in the addition frame with 22 plus 29. I will too." <i>S: will write 22 plus 29 in the addition sentence.</i> T: "Show me your boards. (check the students addition frames to make sure they filled them in correctly)" <i>S: will show the teacher their boards.</i> T: "Good, now let's add. Tell your neighbor what you do first." <i>S: will tell their neighbor, "add the ones first."</i> T: "We add the ones first. Please add 2 plus 9 and write it in the addition frame." <i>S: will add 2 plus 9 and write it in the addition frame.</i> T: "Raise your hand, what is 2 plus 9." <i>S: will raise their hands, "2 plus 9 equals 11."</i> T: "Correct, 2 plus 9 equals 11. Now let's regroup. I will write 1 in the ones place and 1 in the box above the tens place. Now what do I do?" <i>S: will respond, "add the tens."</i> T: "Yes, add the tens. 1 plus 2 plus 2 equals ____? Write it on your board." <i>S: will write 5 in the tens place.</i> T: "Show me your board." <i>S: will show the teacher their boards."</i> T: "Good, 22 plus 29 equals 51. Please read the addition sentence to your neighbor." <i>S: will read, "22 plus 29 equals 51" to their neighbor."</i> T: "Good job, say it with me, 22 plus 29 equals 51." <i>S: will say "22 plus 29 equals 51" with the teacher.</i> T: "That is what we practiced last time, today you will use paper and pencil only to add 2 two-digit numbers." | | |
| Introduction to New Material (Direct Instruction): (7 minutes) <ul style="list-style-type: none"> Write $46 + 26$ on the board in the addition frame. T: "Look at the board, I have written 46 plus 26 in the addition frame. Please write it on your board and solve it." <i>S: will write $46 + 26$ on their boards in an addition frame and solve it.</i> <ul style="list-style-type: none"> As the students solve the problem walk around and help as needed. | | |

T: "Show me your boards. Good job, let's solve it together."

T: "What do we do first?"

S: will respond, "add the ones."

T: "Good, I will add the ones. Tell your neighbor, $6 + 6$ equals ____."

S: will turn to their neighbor and say, " 6 plus 6 equals 12 ."

T: "What is 6 plus 6 ?"

S: will respond, " 6 plus 6 equals 12 ."

T: "Correct, let's regroup. Raise your hand if you want to come up to the board and write 12 in the correct spots."

- Teacher will pick a student.

S: will right 12 in the correct spots in the addition frame.

T: "Awesome, you put the 2 in the ones place and the 1 in the box in the tens place. Thank you. What do we do next?"

S: will respond, "add the tens."

T: "Yes, we add the tens. Show me with your fingers, 1 plus 4 plus 2 equals ____."

S: will show 7 with their fingers.

T: "Good job. 46 plus 26 equals 72 . Please read the addition sentence to your neighbor."

S: will read $46 + 26 = 72$ to their neighbor.

T: "Now, check your boards, does your addition frame look the same as mine?"

S: will check their addition frames.

T: "Show me your boards (check the student work and help the students who did the problem incorrectly). **Good job, you may erase them."**

Guided Practice: (12 minutes)

Use the modeling cycle:

Teacher Does:

T: "Now it is your turn to practice with a partner. I want one of you to be the teacher and the other to be the students. Then you will switch roles. Each of you will teach two problems that I have written on the board."

1 Students Does With Teacher:

T: "Before I let you begin, I need a student to come up and help me."

- Teacher will choose a student.

T: "I want you to teach me how to add using the addition frame. The problem is 15 plus 18 ."

- Write 15 plus 18 in a number frame on the board.

T: "Please teach me how to add 15 plus 18 . Tell me what I do first and then second."

S: will say, "first you add the ones. 5 plus 8 equals 13 . Then regroup."

T: " 5 plus 8 equals 13 . How do I write that in the addition frame?"

S: will respond, "write the 3 in the ones, write the 1 in the box."

- Teacher will write 13 in the appropriate place in the addition frame.

T: "Then what do I do?"

S: will say, "add the tens. 1 plus 1 plus 1 equals 3 . Write 3 here (in the tens place)."

T: "Will you read the addition sentence for me?"

S: will say, " 15 plus 18 equals 33 ."

T: "Very good, thank you for teaching me how to add and regroup. You may sit down."

- Help the student with the steps as needed. If they need help with the language, scaffold them along.

- Write the steps on the board so students can use it while they are teaching each other.

2 Students Do:

- Have 2 addition frames written on the board. Problems are 27 plus 50 and 62 plus 28 .

T: "Now I need two helpers."

- Teacher will choose two students to come up and help.

T: "Student #1 I need you to teach student #2 how to add using the addition frame. Student #2 I need you to pick the cards."

S: #2 will pick the cards and student #1 will write them in the addition frame.

S: #1 will teach student #2 how to add the numbers.

- 1st add the ones.

- 2nd regroup.

- 3rd write the ones in the ones place.

- 4th write the tens above the tens.

- 5th add the tens

- Scaffold the students as needed.

T: "Now you get to switch. Student #1 you will pick the cards and student #2 you will teach student #1 how to add and regroup."

S: #1 will pick the cards and student #2 will write them in the addition frame.

T: "Student #2 I need you to pick a card from the deck and write it on the addition frame."

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

T: "Student #2 teach student #1 how to add and regroup."

S: #2 will teach student #1 how to add and regroup.

T: "Thank you for your help. Now you may sit down."

All Students Do:

T: "Now it's your turn! I will give each group a page 229. The problems are written on the board."

- **25 + 16**
- **76 + 15**
- **40 + 53**
- **63 + 27**

You will need to complete the 4 more problems. You will teach 2 problems each. Use the connecting cubes as needed. You have 8 minutes."

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. Time is up. Please clean up the connecting cubes and turn in your papers, then sit on the floor."

- Collect the papers.

Independent Practice: (10 minutes)

T: "Now it is your turn to practice individually. We will do the first one together and then you will finish guided practice by yourself."

T: "I have the problem written on the board, 34 plus 17 equals ____? Do we add the ones or the tens first?"

S: will respond, "the ones."

T: "Yes, we add the ones first. What is 4 plus 7?"

T: "Raise your hand if you know what 4 plus 7 is."

S: raise their hands and say, "4 plus 7 equals 11."

T: "Do we need to regroup? Thumbs up or down?"

S: will show thumbs up.

T: "I will write 1 below the ones and the other 1 in the box in the tens. What do we do next?"

S: will respond, "add the tens."

T: "Yes, we add the tens. 1 plus 3 plus 1 equals ____? Tell your neighbor."

S: will tell their neighbor, "1 plus 3 plus 1 equals 5."

T: "Show me with your fingers."

S: will show 5 with their fingers.

T: "Good, read the addition sentence to your neighbor."

S: will read, "34 plus 17 equals 51."

T: "Very good, did we regroup? Thumbs up or down?"

S: will show thumbs up.

T: "Now it is your turn to do the rest of guided practice. You will have 6 minutes to do 5 problems."

S: will work on the rest of the problems.

T: "10, 9, 8, 7, 6, 5, 4, 3, 2, 1. Time is up. Turn in your papers and sit on the floor."

- Collect the papers.

Closing: (8 minutes)

- Pass out whiteboards, erases and markers.

T: "To finish up today I am going to read you a story problem. As I read it I will write the information on your board. To start with, write an addition frame on your board."

S: will write an addition frame on their board.

T: "Amir planted 25 trees. Juan planted 27 trees. Write the information on your board."

S: will write 25 and 27 on their boards.

- Teacher will write 25 plus 27 on the board in the addition frame.

T: "How many trees did they plant in all? Find the answer."

S: will find the answer and write it on their board.

T: "Show me your boards. Good job. I wrote 25 plus 27 in my addition frame. Tell your neighbor what you do first."

S: will say, "add the ones."

T: "Yes, first I will add the ones. 5 plus 7 equals 12. I need to regroup. Where do I write the 2?"

S: *will say, "in the ones place."*

- Write 2 in the ones place.

T: "Where do I write the 1?"

S: *will say, "in the box."*

T: "Yes, I will write 1 in the box above the 1."

- Write 1 at the bottom the tens column.

T: "Then what?"

S: *will say, "add the tens."*

T: "Yes, add the tens, 1 plus 2 plus 2 equals 5. I will write that. Read the addition sentence to your neighbor."

S: *will read, "25 plus 27 equals 52."*

T: "Good job, 25 plants plus 27 plants equals 52 plants."

Assessment:

Guided Practice

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