

Standards:

**1.NBT.B.2** Understand that the two digits of a two-digit number represent amounts of tens and ones.

**1.NBT.C.4** Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models of drawings and strategies based on place value, properties of operations; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

Standard for Mathematical Practice:

SMP4: Model with Mathematics

SMP5: Use appropriate tools strategically.

SMP7: Look for and make use of structure (place value).

SMP8: Look for and express regularity in repeated reasoning (pattern in adding multiples of 10).

K: Place value

Value vs. digits

Tens & ones

Expanded form

U: Students will understand that only like things can be added (tens+tens, ones+ones)

Students will understand that numbers can be broken apart to make addition more clear: $28+12 = 28 + 10 + 2$

Students will understand that different strategies can be used to solve the same problem

D: The students will be able to verbally explain how they solved a 2-digit addition problem

The students will be able to model strategies to solve a 2-digit addition problem

The students will be able to show the role of place value in 2-digit addition (tens+tens, ones+ones)

Whole Class:

1. Review tally method of addition of 2 digit numbers with Base 10 blocks.
2. Have students take turns modeling both magnetic base 10 and tally marks.
3. Snowball fight – use paper to write a math problem. Crumple up paper and throw – each student grabs a ‘snowball’ and solves the problem using base 10 and tally method.

Partner Activity:

With partners, play 4 in a Row – different versions allow for differentiation based on readiness.  
Recording sheet to check for understanding

Re-Teach: Select students not able to show understanding of addition to the teacher table to play the basic version of the game with the teacher present. Reinforce with KP Ten frames, base-10 blocks and Hundreds chart the role of place value. Joke with students about “fair trades” to reinforce the difference of one ten and one unit.

Formative Assessment/ Check for Understanding: Four Square Strategies for Addition page

Closure: What was the most challenging problem you made while playing the game? How did you solve it? What was your answer? How did you know your answer was reasonable and correct?