

Date: 2/18

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.

**1.NBT.C.5** Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used

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.

Small Group MATH Rotations:

**M** – Math Games – Dice Roll Addition – Use 2-10 sided dice (0-9) and 1 place value dice (with numbers 10, 20, 30 etc.. – these can also be made with different numbers to accommodate different levels). Roll 2 dice to make a 2 digit number, then roll the place value dice to make the second number to add. Choose strategy to solve (100 board, Jump Method, Base 10 or Tally). Record on paper.

**A** – All By Myself – Four Square Strategies for Addition page – Differentiation by readiness and interest.

**T** – Teacher Time – Differentiated instruction (based on learning profiles) with Base 10 blocks or offer use of other manipulative – KP tenframes, paper, etc... to help those who may struggle with base 10.

**H** – Hmmm..- Magic 9 squares – 2 digit numbers and multiples of 10s. Different versions (levels) allow for differing levels of ability.

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

Closure and beginning summative assessment: Students explain how to add 2 two-digit numbers being sure to include the words “tens” and “ones” in their explanation. They will have the choice of:

- Verbal or written (one or two sentences) explanation
- Drawing a picture
- Using a model