

**K**

**DOMAIN:** NBT

**CLUSTER:** Work with numbers 11-19 to gain foundations for place value.

**STANDARD(S):**

13. Compose and decompose numbers from 11 to 19 into tens ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g.,  $18 = 10 + 8$ )\*; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. [**K.NBT.1**]

*\*Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.*

**Materials:** Present everyone with a bag with 14 counters and a tens frame.

Ask,

“How many counters did you estimate?”

“Do you think all the counters will fit on the Tens Frame?”

“What did you find out after placing the counters on the Tens Frame?”

“How could you extend/ go deeper with this task?” (possible answer: repeat with more counters)

**1<sup>st</sup>**

**DOMAIN:** NBT

**CLUSTER:** Use place value understanding and properties of operations to add and subtract.

**STANDARD(S):**

12. 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 or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; 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.4**]

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

Ask,

“What type of Word-Problem is this?” (add to – result unknown)

“What strategy did you use to solve the problem?”

“Can you solve the problem a different way?”

“The standard said mentally find 10 more or 10 less and in this problem you are adding 20 more, what should your students be able to do with the 20?” (decompose it into 2 two tens then add it mentally)

“How could you extend/ go deeper with this task?” (possible answer: repeat with different numbers)

**DOMAIN:** NBT

**CLUSTER:** Use place value understanding and properties of operations to add and subtract.

**STANDARD(S):**

11. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. [**2.NBT.7**]

12. Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. [**2.NBT.8**]

13. Explain why addition and subtraction strategies work, using place value and the properties of operations. [**2.NBT.9**] (Note: Explanations may be supported by drawings or objects.)

Ask,

“What type of Word-Problem is this?” (add to – change unknown)

“What strategy did you use to solve the problem?”

“Can you solve the problem a different way?”

“How could you extend/ go deeper with this task?”

- 1.) How many do you think there might be? \_\_\_\_\_
- 2.) Do you think they will fit on the ten frame? \_\_\_\_\_
- Use the ten frame to find out how many counters there are.
- 3.) Did you have enough to fill the ten frame? \_\_\_\_\_
- 4.) How many did not fit on the ten frame? \_\_\_\_\_
- 5.) How many counters are there in all? \_\_\_\_\_


**Alyssa found 78 pinecones on the playground. Then, Alyssa found 20 more pinecones at home. How many pinecones did Alyssa find?**

Show your thinking with pictures, words, or numbers.

\_\_\_\_\_ pinecones

Sunshine Elementary has 216 kindergarteners and 278 first graders. All of the kindergartener and first graders are on the playground. How many students are on the playground?

Explain your reasoning with drawings, words, and/or numbers.

\_\_\_\_\_ students are on the playground.

When the second graders at Sunshine Elementary came onto the playground there were 700 students.

How many second graders attend Sunshine Elementary? \_\_\_\_\_

Explain your reasoning with drawings, words, and/or numbers.

\_\_\_\_\_ second graders attend Sunshine Elementary.

Write an equation to match the situation.