

Lesson Title: Candy Cane Tens

Grade: Kindergarten, 1st

Content Standards: K.NBT.1 Compose and decompose numbers from 11 to 19 into a group of ten ones and some further ones by using objects and, when appropriate, drawings or equations; understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 10 can be thought of as a bundle of ten ones – called a “ten;” the numbers 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones; and the numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

Materials: Each pair of students will need a zip lock bag containing 43 (number optional depending on class) plastic beads and five 4” lengths of pipe cleaners (beads must have holes that allow them to slide onto the pipe cleaners, and the pipe cleaner lengths must be long enough so that ten beads will fit on them and still have extra wire on each end that can be bent off to hold beads in place). Five Step lesson papers.

Shared experience and procedure details: Story narrative – “Today you need to be elves and help me, Santa, get ready for Christmas. I need help making candy canes. Each candy cane is made with beads and pipe cleaners (model how to slide ten beads onto a pipe cleaner section, bending off each end to hold the beads in place, and then forming it into the shape of a candy cane). I am going to give each pair of you a bag of beads and pipe cleaners, and I want you to make as many candy canes as you can.”

Pair off students and let them construct candy canes. When they have finished, have them draw a picture of what they have constructed and any leftover pieces on the picture section of the five step lesson form. I preface the drawing by brainstorming a list on the board of the key features that might be in their pictures and what they needed to do the activity. The feature list might include: numbers, counting, tens, ones, pipe cleaners, beads, baggies. The extent to which I ask them to also write about what they did to construct the candy canes will depend on the age of the class.

Possible picture: The pictures may include four completed candy canes, three leftover beads, and one leftover pipe cleaner. The candy canes may also be detailed to show individual beads on each one. The students may also use numbers as an alternative way in their pictures to show how many of each item remained.

Possible people talk: The discussion is directed first to the different way students represent their results. A second question to discuss is if the students can determine how many beads were in the bag to begin with given the results of their construction.

Feature talk: Feature talk in this activity was embedded in the directions to draw a picture that showed what the children constructed from the original 43 beads. Review the feature words written on the board earlier. Create with the class a sentence that tells what they did using those words: The beads in my bag made 4 candy canes and there were 3 beads left over.

Possible symbolic representation: To symbolize the beads they started with, I would expect pictures of beads in a bag, possibly with a question mark, or with some using the number 43 along with the pictures. Students may use different symbols for “make” such as an arrow or an equal sign. To represent four tens, most will draw 4 candy canes, but some may use the number 4 with a single cane and others may use 4 10’s. The beads may also be represents with pictures of 3 beds or the use of the number 3.

Grover, Deal, Reinthal 12/20/17

Search words: place value, making tens