Lesson Title: Making 10 Garden Grade: K/1

Content Standard:

K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing, or when appropriate an equation

Extension for First Grade:

1.OA.6 Add and subtract within 20, demonstrating fluency with various strategies for addition and subtraction within 10. Strategies may include counting on; making ten, e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14.

Materials:

Recording sheet Number cards 0 - 10 Container for cards Separate container for discarded cards 10-frame "garden" (popsicle ten frame) Counters in 2 different colors (flowers) Crayons in the same colors as the counters Letter from gardener (for teacher to read to students) Found at bottom of lesson

1st grade extension:

Counters in 2 different colors (flowers) Crayons in the same colors as the counters 2 sets of number cards for teacher to draw from that would make a sum between 11-19 2 10 frame "gardens" (popsicle ten frame) <u>Recording sheet with 2 tens frames</u>

Shared Experience and procedure details:

Set up: Each group will need 10 flowers in two different colors. (20 total) They will need a ten frame garden (popsicle ten frame) Number cards from 0-10. Organize students into pairs.

Shared Experience:

Teacher will read the letter from the gardener, explaining his problem. Students will then get with their partner to begin gardening. They will select a card and place that many flowers in the garden They will then need to fill the rest of the garden using the opposite flower color. When they have a garden full, they will then need to draw/color their garden on the recording sheet, then follow the same steps using a different starting number.

1st Grade Shared Experience:

Teacher will tell students that the gardener now has 2 gardens to plant with two different colors of flowers. The problem is one garden has to filled before the second garden can be planted. Students will get two "gardens" and 20 flowers.

The teacher will choose two cards (1 at a time) for the students to represent in their gardens. The students will fill in their gardens and their recording sheet.

What do you have to do to make the garden the way the gardener asked? The students will show what they did.

Repeat process a couple of times.

Possible Picture:

Garden box with one of their flower combinations colored in Flowers Gardener Number Cards

1st Grade Picture:

Two ten frames with their flower combinations colored in Flowers Number cards

Possible People Talk:

I put the flowers in the box. I had _____ pink flowers and _____ blue flowers. I drew a number. We had 10 flowers altogether. I filled the flower box.

1st Grade People Talk:

I put the flowers in the box. I moved some flowers from one box to the other box. I made a group of ten. All of the flowers would not fit in one box. I had some left over for the other box. All of the (insert color) flowers were not in the same box now.

Feature Talk:

Ten How many more Add Plus Equals Digit/number pairs Flower Colors of the flowers

1st Grade Feature Talk: (all of the above) Made ten Extra

Too many

Possible Symbolic Representation:

Ten frame with two different colors They might draw 6 flowers and 4 flowers Number sentence

1st Grade Symbolic Representation:

Two ten frames with the two colors of the flowers They might draw the two groups of flowers (8 blue and 6 white) Number sentences: 8+2+4=14 or 8+6=14 or 10+4=14

Written By: Kathleen Barnet, Becky Armrose, Beth Cuppy, Kimberly Ison, Dolores Bluntschly, Deanna Albert Date: June 15, 2017

Number Garden Shop

(letter for kindergarten lesson)

Dear Boys and Girls,

Hello! My name is Mrs. Digit and I am a gardener. Your teacher was in my shop the other day and told me that you were learning a lot about math. I was excited to hear this because I have a problem. I need to plant a garden and don't know what flowers to plant. I was hoping that you could help me!

Here is an example of the flower garden that I need to plant. I have to plant two different color of flowers in each garden. I am hoping that you can show me different ways I can plant my flowers. I will also need to know how many of each flower to order.

Thank you so much for helping me out. I am excited to see all of the different ways to plant my flowers!

Sincerely,

Mrs. Digit

Number Garden Shop

(letter for first grade lesson)

Dear Boys and Girls,

Hello! My name is Mrs. Digit and I am a gardener. Your teacher was in my shop the other day and told me that you were learning a lot about math. I was excited to hear this because I have a problem. I have a customer who wants me to plant two gardens, and I don't know where to plant the red roses and blue violets. I was hoping that you could help me!

Here is an example of the flower gardens that I need to plant. (hold up 2 ten-frames). THe customer has asked for 8 red roses in one garden and 5 blue violets in the other garden. After you plant them, can you tell me how many flowers there are altogether? (Hand out recording sheets, red/blue crayons to each pair of students).

Thank you so much for helping me out. I am excited to see how the gardens look!

Sincerely,

Mrs. Digit

(After they determine a total, say, "The customer decided that it looked funny with both gardens being not quite full. How can we change it so that one garden is full?")