1. THE SWEET BEAT: MATH

GRADE LEVEL – 1ST GRADE & 2ND GRADE

E: How can I group fruits by color, and use them to add and subtract?

A: Begin instruction by showing students the *Jump with Jill Sweet Beat* Music Video: www.jumpwithjill.com/watch/sweet-beat-music-video/

- After the video, ask your students to share fruits they remember from the video and record for all contributions to be seen and manipulated.
  - Describe the scenes of the video (red in the gym, orange-yellow at the concert, green at the crosswalk blue-purple in the classroom) to ask students to identify the common trait that divided them. Guide the discussion so students highlight the commonality of color.
    - Explain that color represents nutritional powers that contribute to the unique taste, flavor and smell of each fruit. For example, watermelons and grapefruits are red because of lycopene and blueberries are blue because of anthocyanin.
    - These unique color compounds of plants are not vitamins or minerals; they are powerhouse nutrients called phytochemicals that have been shown in research to contribute to protective effects from diseases like cancer and heart disease. You can remember this by calling them "fight-off-chemicals" because they ward of sickness and disease with their powerful antioxidant effects.
    - So not only are fruits good looking and sickness preventing, fruits taste distinctly SWEET!
- Generate a list of fruits showcased in the video. Group each fruit by color with the help of your students.
    - Name any additional fruits that can be added to each color group that were not featured in the video. Fruits are technically anything that comes from the flower of the plant, so don't get too technical to distinguish a fruit from a vegetable.

- After each fruit is grouped by color, ask students to count how many fruits are in each group. Write the number of fruits next to each group. For example, 7 Green Fruits, 6 Red Fruits, 4 Yellow Fruits, 6 Purple Fruits**T:** Use groups of fruits to add and subtract.
- Start by fully demonstrating how students can use groups of fruits to add or subtract.
    - Count each fruit group and write the number of fruits you have in each group above them (example, 7 and 6).
    - Add a plus sign in the middle.
    - Ask how many fruits you have in your circles (example, count to 13) and then draw an equals sign to the right of your circle and write the number (example, 13). The problem should be displayed above or below your drawing (example, 7 + 6 = 13).
    - Talk aloud and say "If I add 7 green fruits with 6 red fruits, I have 13 total fruits."
- Ask a student to volunteer to work through an addition problem with you (example, adding the red and yellow or yellow and purple, etc).
    - After you have found the answer but before erasing, ask the class what would happen if you were to eat 3 fruits from a group? Erase 3 fruits and count aloud how many total fruits you have now in each group.
        - Speak aloud and read the problem (example, "If I had 10 total fruits and I ate 3 of them, I now only have 7 total fruits.").
        - Write 10 - 3 = 7 beneath the drawing and beneath the original addition sentence. This is how you subtract!
        - Erase and ask for one last student volunteer.
- Ask the student to choose two more groups of fruit to add and writing the problem (example, 7 + 6 = 13 fruits).
- Demonstrate subtraction. What would happen if you were to eat 4 purple fruits? Erase 4 purple fruits.
    - Ask the student to count how many total fruits there are now.
    - Help the student write the subtraction sentence and read aloud.

S: Have students work on their own to complete independent activities: Activity 1 *Jump with Jill Addition and Subtraction with Fruits!* and Activity 2 *Sweet Beat Color by Number*

- Collect the activities, review student answers, and decide if there are specific areas that need improvement.
- At the end of class, have students complete one giant question similar to the bonus as a class and have them post or write their answers.

1st Grade
CCSS.MATH.CONTENT.1.OA.A.1
Represent and solve problems involving addition and subtraction within 20.
2nd Grade
CCSS.MATH.CONTENT.2.OA.A.1
Represent and solve problems involving addition and subtraction within 100.