How To Introduce a Repeated Equal Groups Structure of Equality

Optional Materials: Dry Erase Sentence Strips/Board, Dry Erase Markers, Snap Cubes

1. Display a number story that describes composing equal groups to form a total. With the question removed. If the story is written on chart paper, cover the values with a sticky note. If the story is electronically displayed, remove values.
2. Ask students to read the story in their brain two times. Or read story aloud to the class two times.
3. Ask the following questions-
   - Does the story have a main character? If yes, who/what is it?
   - Where might the story take place?
   - Does the story have an action or verb? What is it?
   - What is the thing or item in the story that is being composed?
   - What is the math main idea? (The story describes putting equal groups together to form a total.)
4. Say, "We can map out this story using a graphic organizer called a Repeated Equal Groups (REG) Structure of Equality."
5. Draw the vertical and horizontal lines of the array and then write the label with a blank in front of it. Say, "This vertical line represents the (insert label)." "This horizontal line represents the (insert label)." Write the labels on the array.
6. Reveal the values and draw the appropriate number of circles to represent the items in the first group. Say, "These circles represent the first group of (insert label) ." When first introducing REG, keep values below 10.
7. Say, "Structures of Equality have three important elements to them."
   - "They have values, which are represented by these numbers."
   - "They have labels, which is (insert labels) in this story. Point to the labels."
   - "They represent equality or the relationship occurring in the story. The equality is in these repeated equal groups."
8. Say, "Structures of Equality help us understand what the number story is asking us to do. When you map out a number story using a Structure of Equality, I can see what your brain is doing."
9. Remove the number story and say, "Who can retell the number story using the Structure of Equality to help them?"
10. Repeat daily without solving until the students can draw a Repeated Equal Groups Structure of Equality independently.

*Number stories can also be modeled using snap cubes.
If you choose this option, use different color snap cubes
to represent each group.