Eureka Math

Kindergarten
Module 4
Lesson 4

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- ➢ When the Google Slides presentation is opened, it will look like Screen A.
- ➢ Click on the “pop-out” button in the upper right hand corner to change the view.
- ➢ The view now looks like Screen B.
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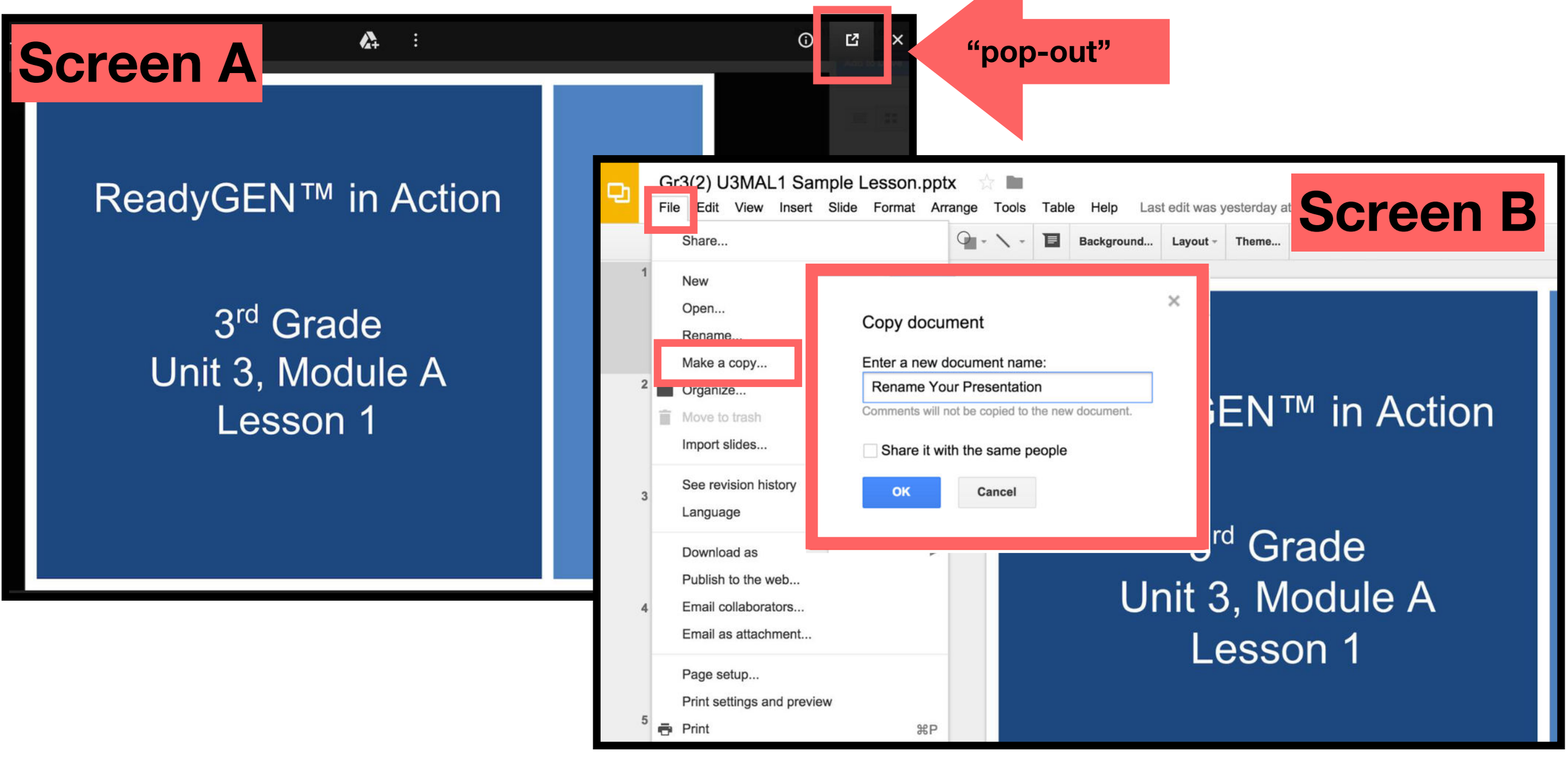
- ➢ Choose MAKE A COPY and rename your presentation.
- ➢ Google Slides will open your renamed presentation.
- ➢ It is now editable & housed in MY DRIVE.



Materials

- Teacher
  - Familiar objects that exemplify the part–whole relationship such as a whole apple and an apple slice or a whole banana and a banana peel

Materials

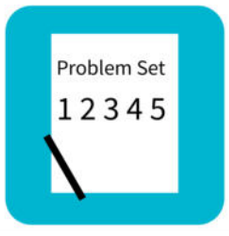
- Student:
  - Dice and 12 linking cubes per pair
  - 4 beans
  - make a bond of 4 (Fluency Template) inserted into personal white board
  - Small piece of clay
  - Paper
  - Pencil
  - Number bond (Lesson 1 Template 2)
  - two linking cube 5-sticks (all of the same color)
  - personal white board

Icons

Read, Draw, Write

Learning Target

Personal White Board

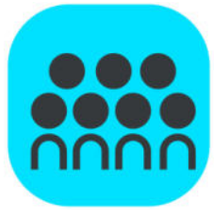


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

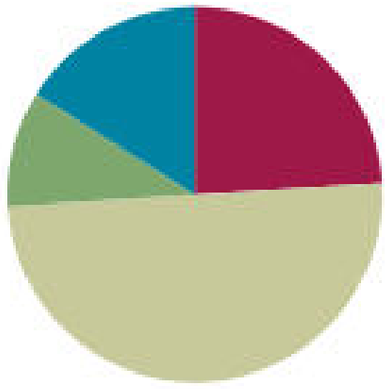
Small Group Time

Lesson 4

Objective: Represent decomposition story situations with drawings using numeric number bonds.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(5 minutes)
Concept Development	(25 minutes)
Student Debrief	(8 minutes)
Total Time	**(50 minutes)**



I can represent decomposition story situations with drawings using number bonds.

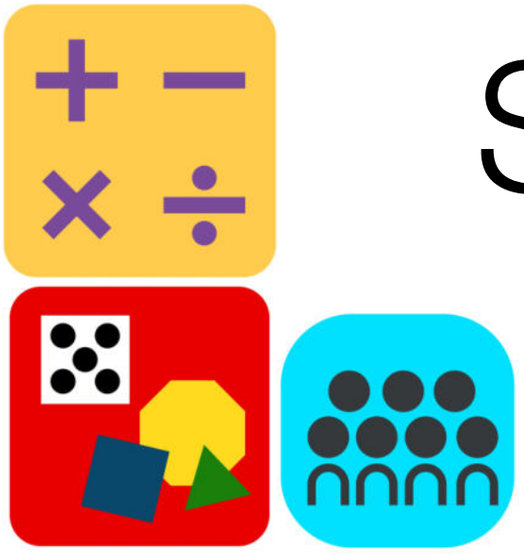
Comparing Towers (5 min)

Each partner rolls a die and creates a tower using the number shown on the die.
Compare towers and make a less than, more than, or same as statement. Then, add cubes to the shorter tower so it is the same height as the longer tower. (Consider providing cubes of different colors so students can easily count how many more cubes they added to make the towers the same length.)

Show Me Part or Whole (3 min)

Show me the sign for whole. (Model two hands clasped together.)

Let’s use our math muscles and take it apart (exaggerate with facial expression as if straining to pull the two hands apart).



Show Me Part or Whole (3 min)

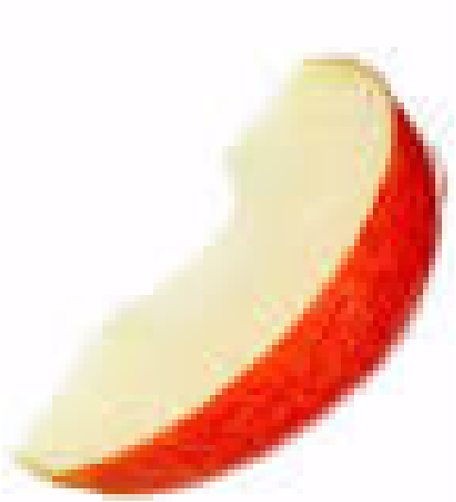
Show me whole.

Show me parts.

Whole, part, whole, part, part, part, whole, whole, part…

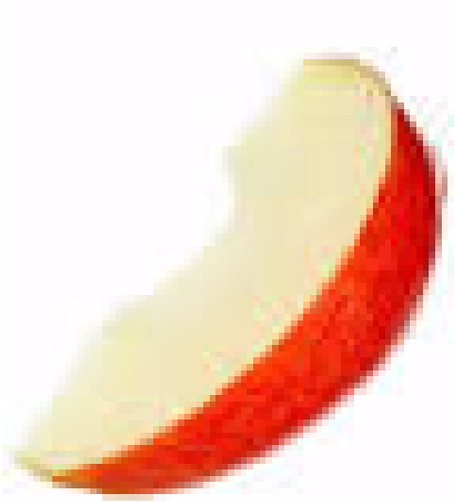
Show Me Part or Whole (3 min)

Now, I'll show you some objects, and I want you to decide if it's the whole thing (reinforce with hand gestures) or just part of something (emphasize with gesture). Is this the whole apple or part of the apple? Think. (Pause.) Now, show me.



Show Me Part or Whole (3 min)

Now, I'll show you some objects, and I want you to decide if it's the whole thing (reinforce with hand gestures) or just part of something (emphasize with gesture). Is this the whole apple or part of the apple? Think. (Pause.) Now, show me.



Show Me Part or Whole (3 min)

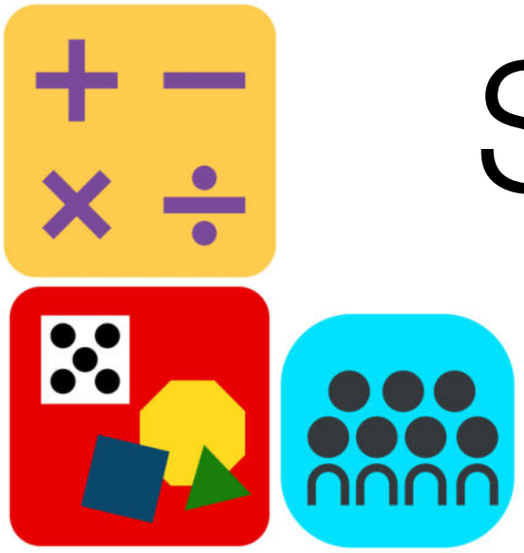
Now, tell me. Is it whole (gesture) or part (gesture)?

Show Me Part or Whole (3 min)

Very good. Look at what I have now. (Show a whole apple.) Whole or part? Think. (Pause.) Now, show me.

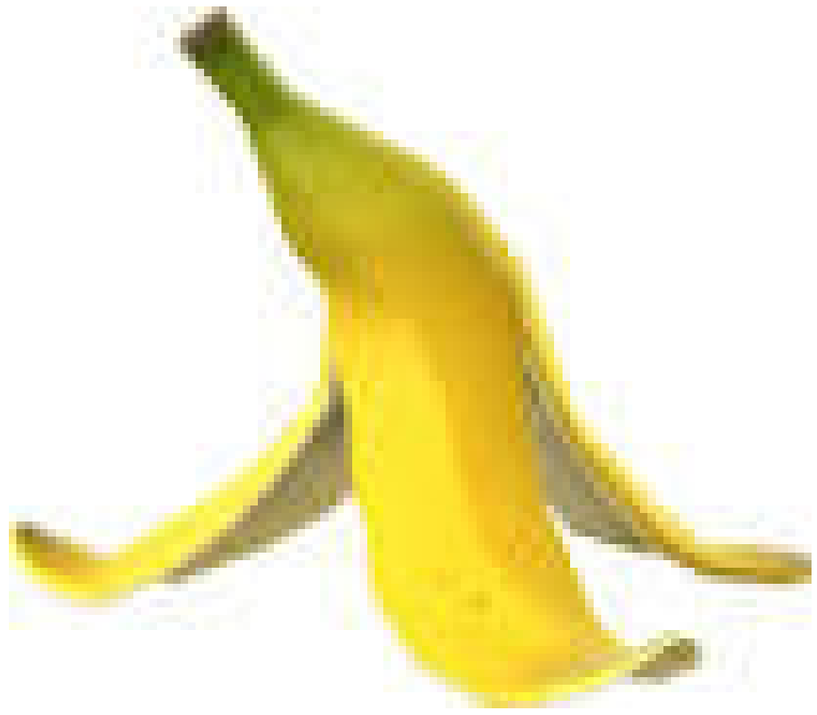
Show Me Part or Whole (3 min)

Raise your hand when you know the math word. (Wait for all hands to go up, and then signal.)



Show Me Part or Whole (3 min)

Now, tell me. Is it whole (gesture) or part (gesture)?



Show Me Part or Whole (3 min)

Very good. Look at what I have now. Whole or part?

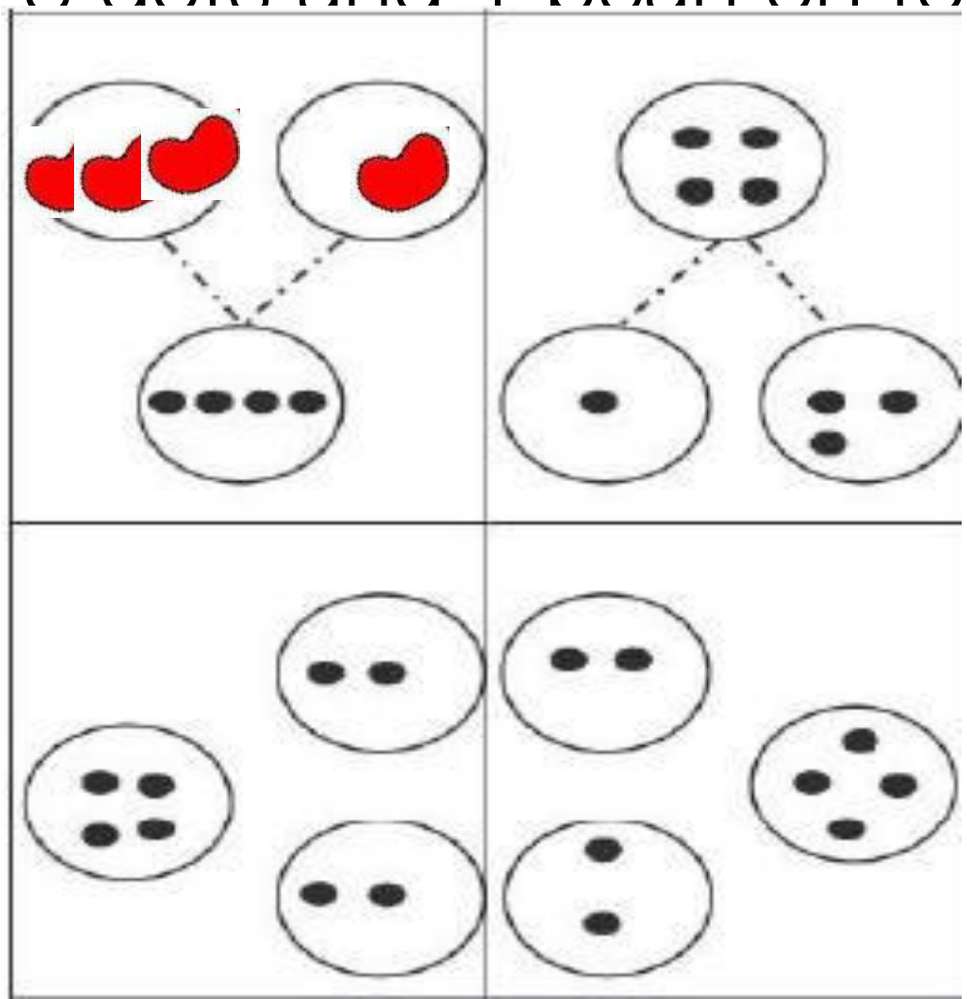
Think. (Pause.) Now, show me.

Show Me Part or Whole (3 min)

Raise your hand when you know the math word. (Wait for all hands to go up, and then signal.)

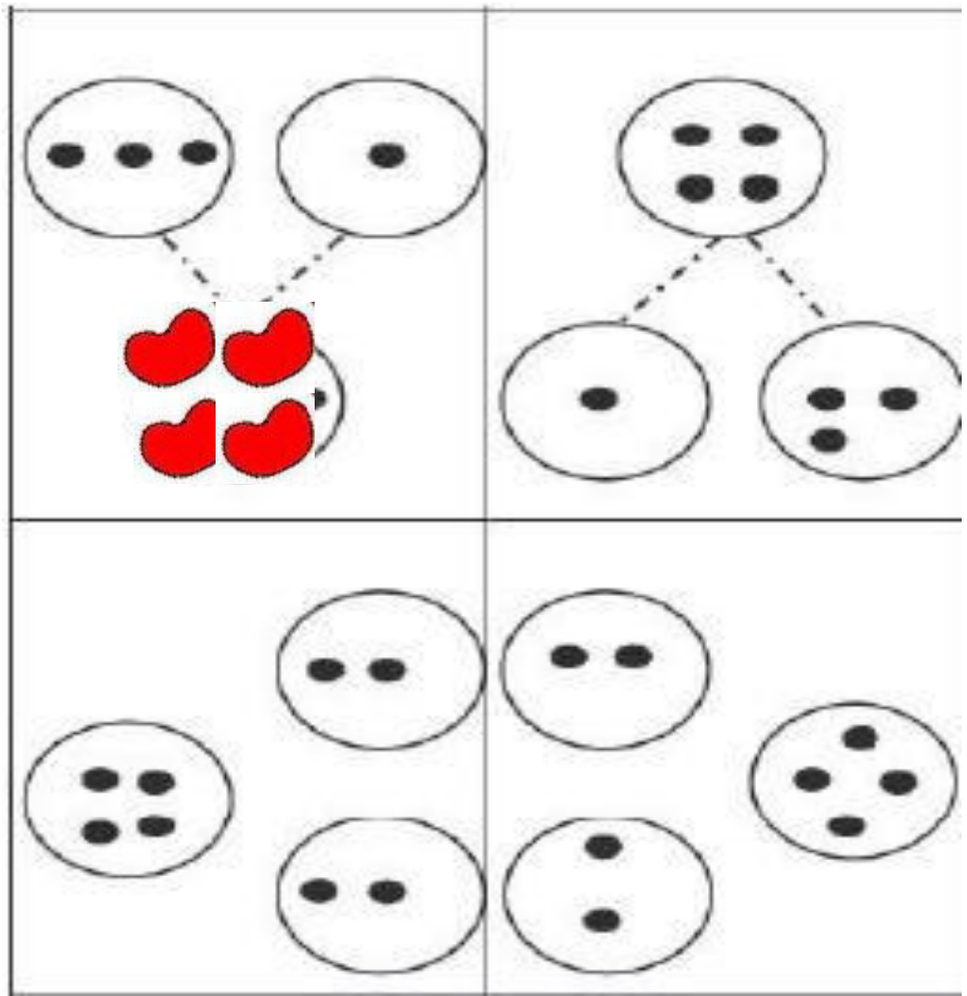
Draw to Make a Bond of 4 (4 min)

Take out 4 beans. Point to the first number bond. Put 3 beans on top of the 3 dots and 1 bean on top of the 1 dot.



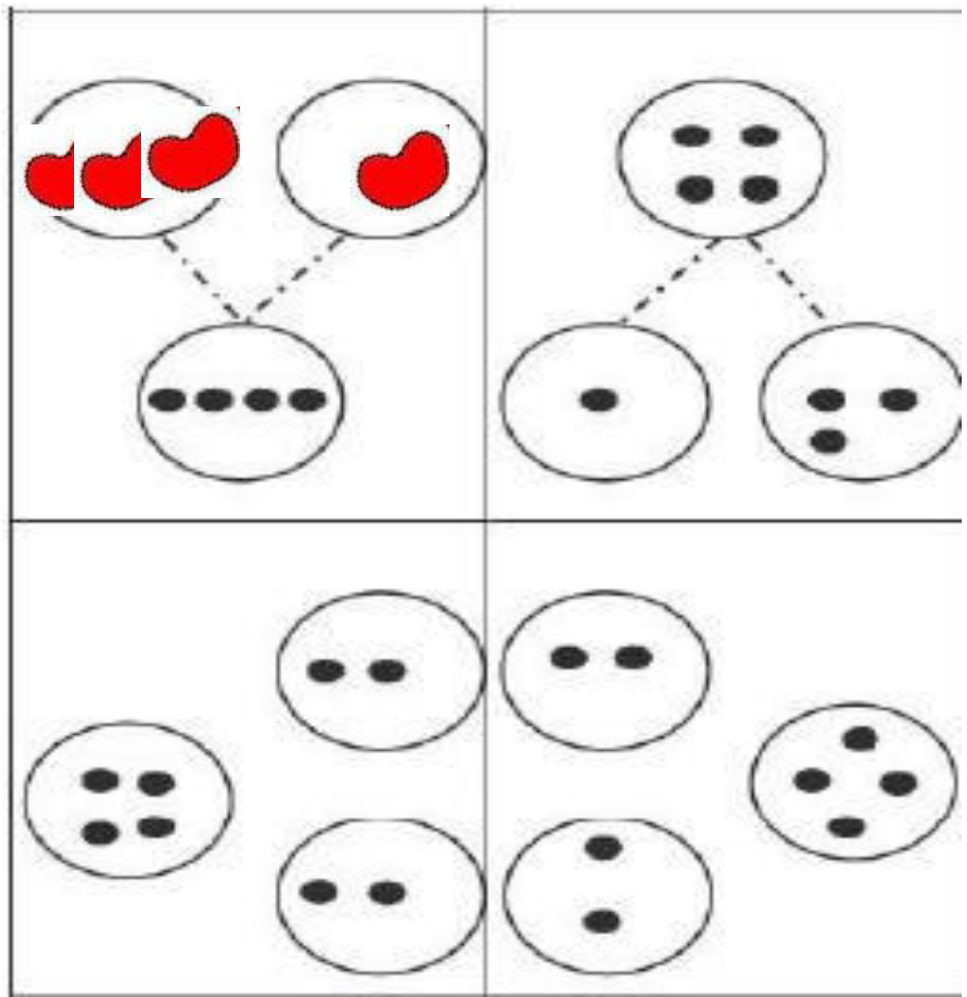
Draw to Make a Bond of 4 (4 min)

Our job is to make 4. Slide your beans along the lines to make 4.



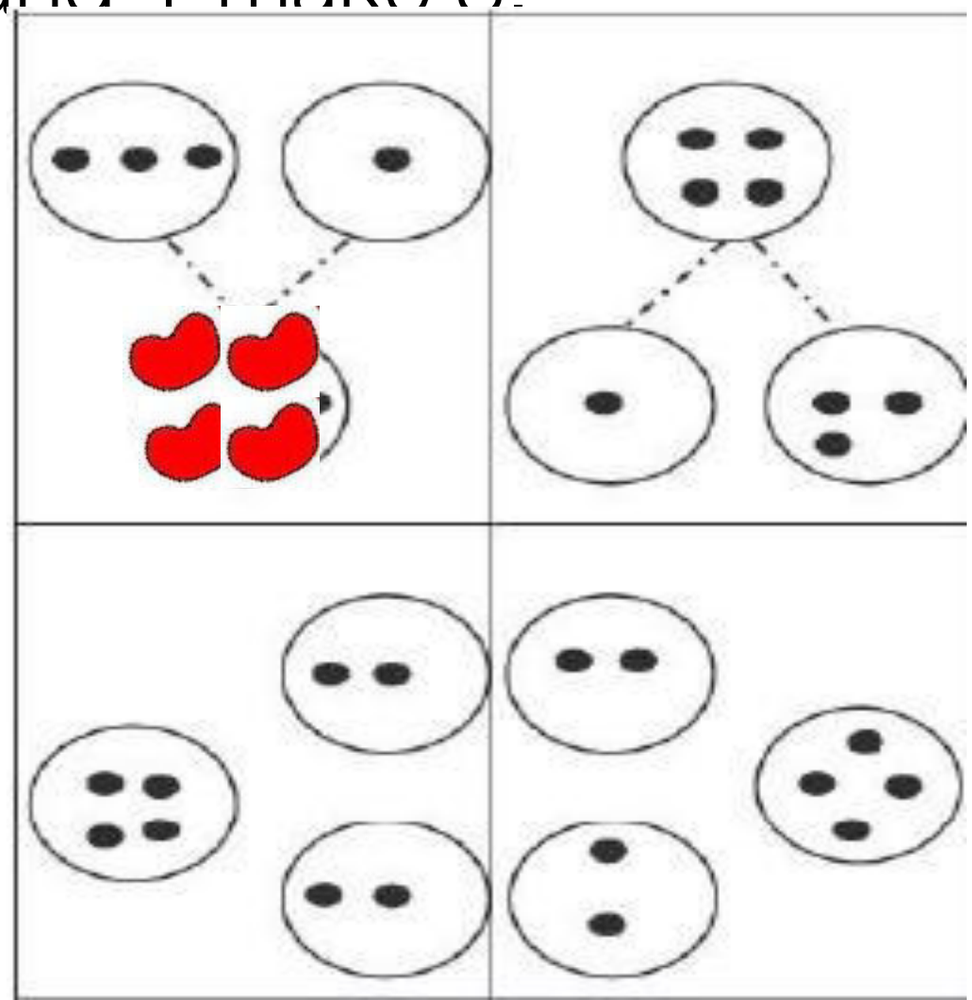
Draw to Make a Bond of 4 (4 min)

Now, slide your beans back to take apart 4.



Draw to Make a Bond of 4 (4 min)

Let’s slide the beans again, and this time, tell how to make 4, like this 3 and 1 make 4.

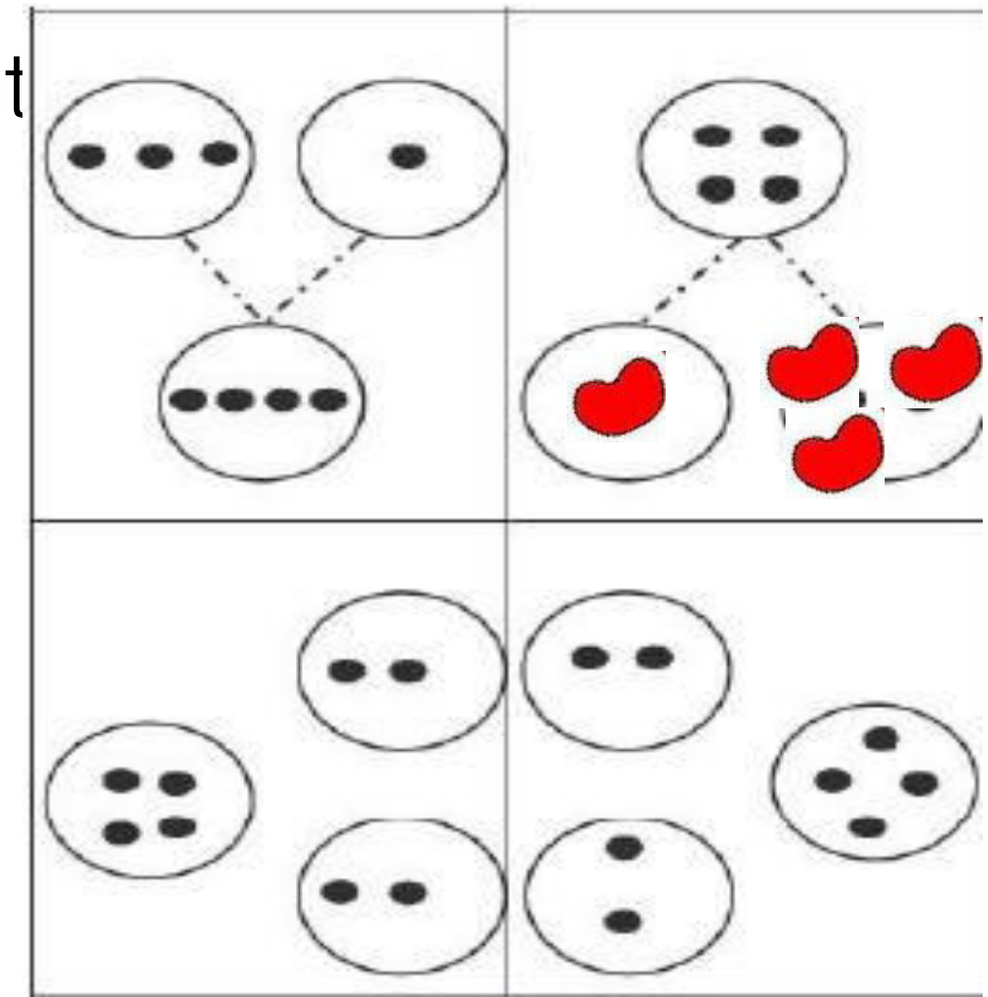


Draw to Make a Bond of 4 (4 min)

Take them apart again.

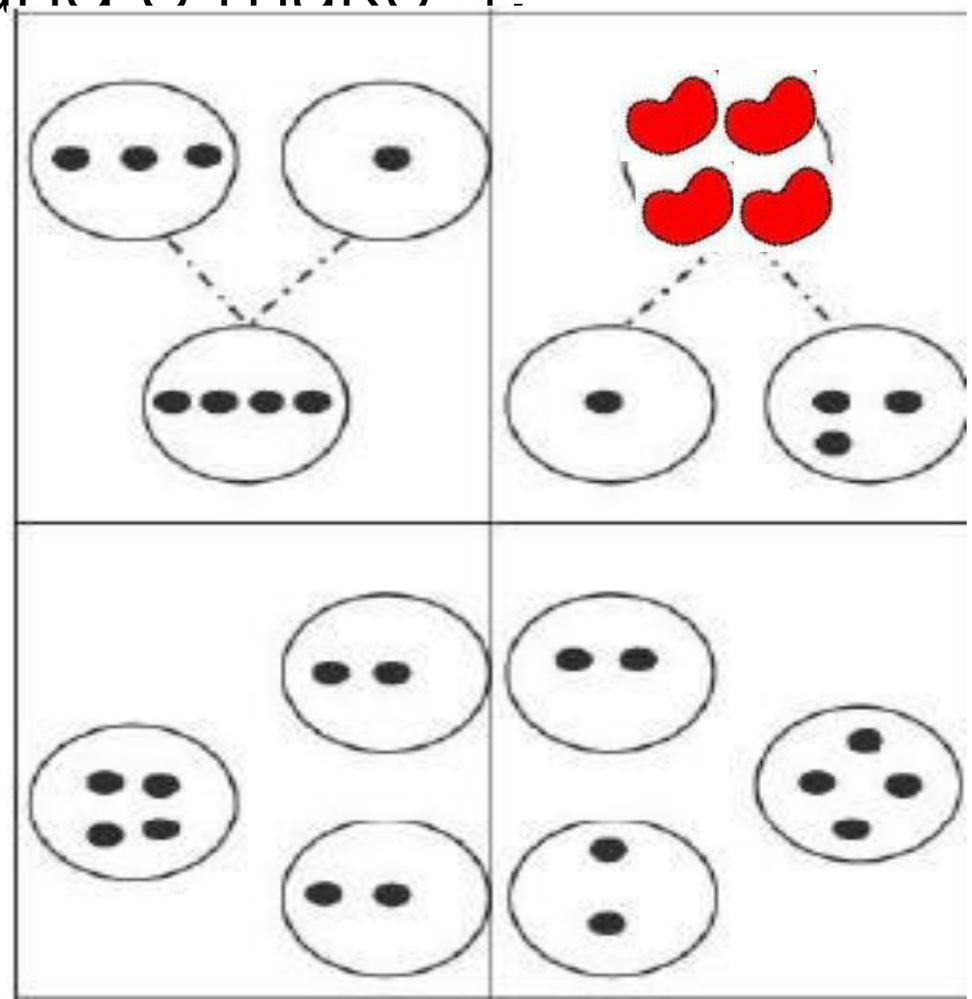
This time, we'll flip it

1 and 3 make 4.



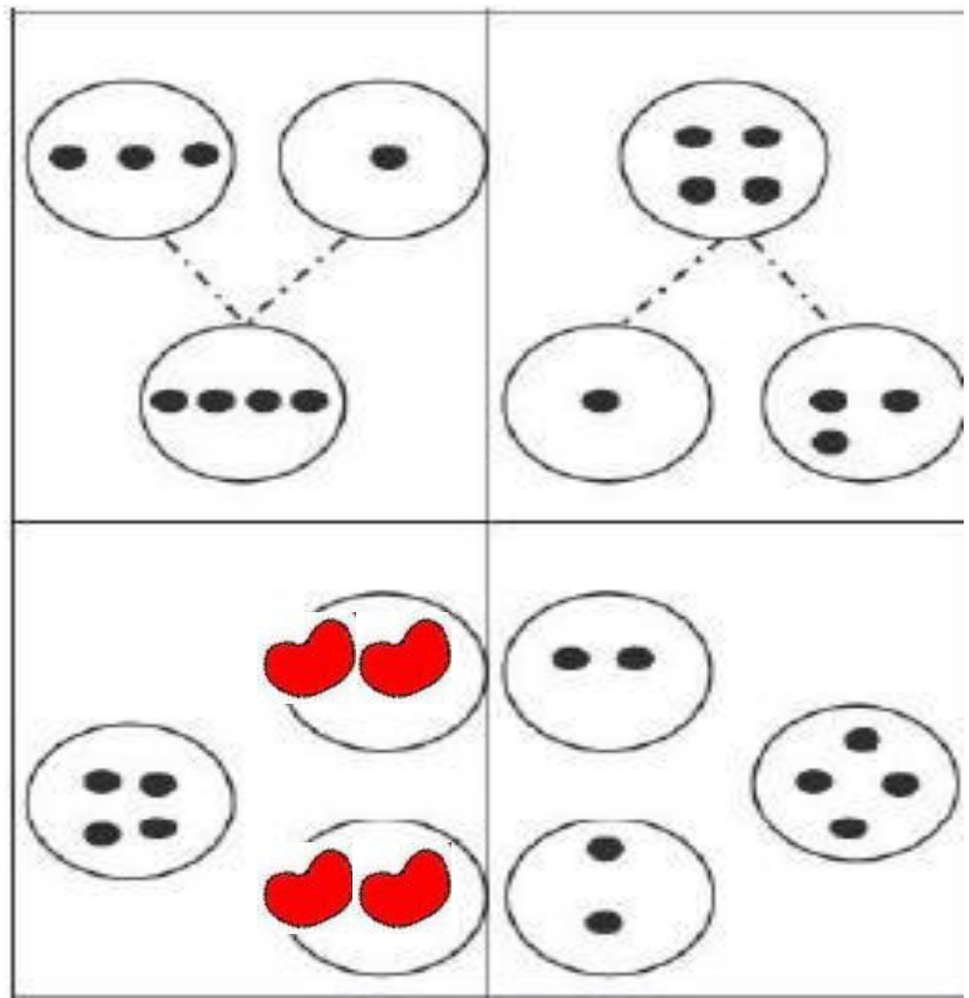
Draw to Make a Bond of 4 (4 min)

Let’s slide the beans again, and this time, tell how to make 4, like this 1 and 3 make 4.



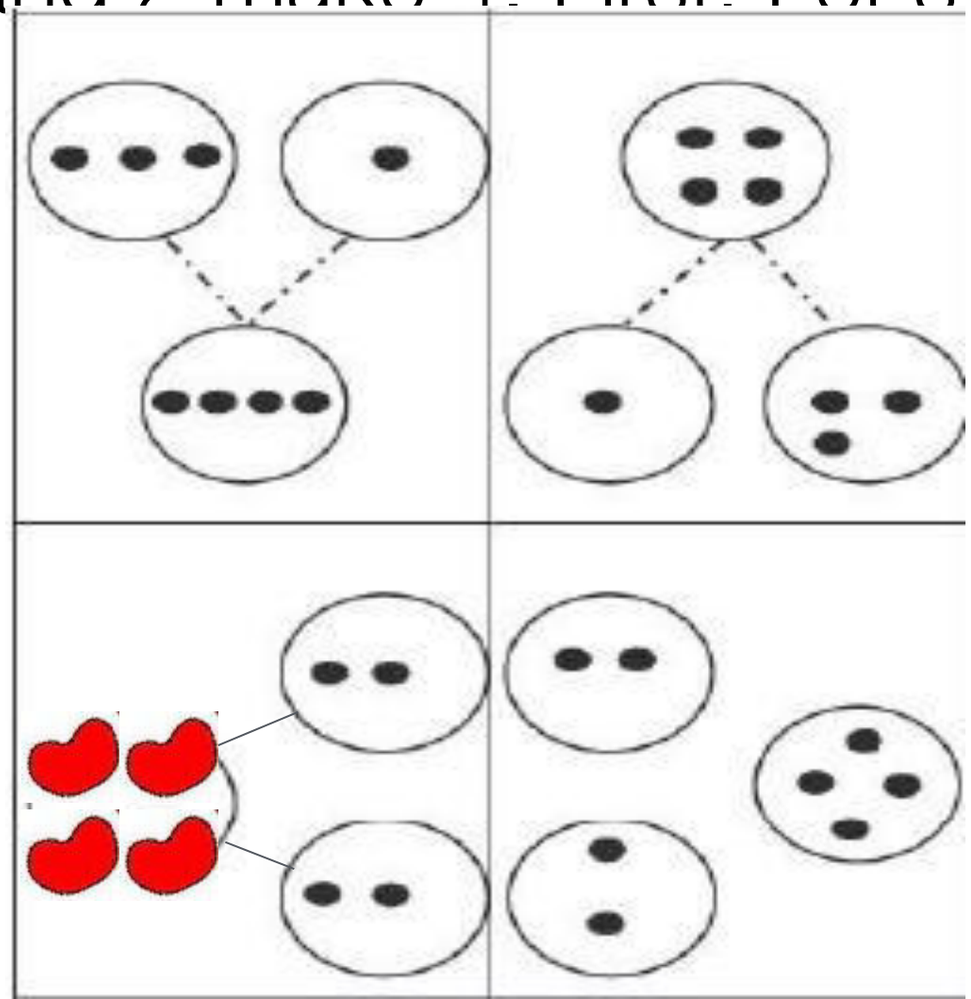
Draw to Make a Bond of 4 (4 min)

Now let's try 2 beans in the first part and 2 beans in the other part.



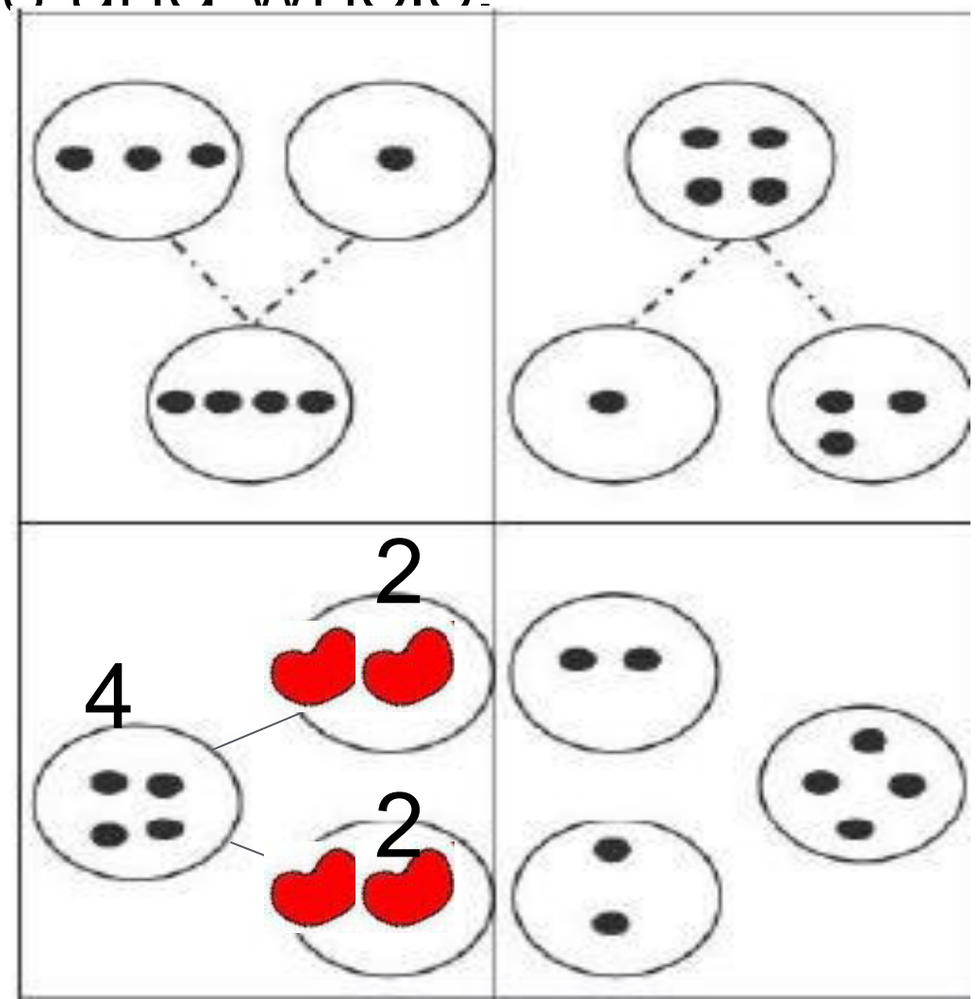
Draw to Make a Bond of 4 (4 min)

Let’s slide the beans again, and this time, tell how to make 4, like this 2 and 2 make 4. First, I et’s draw lines.



Draw to Make a Bond of 4 (4 min)

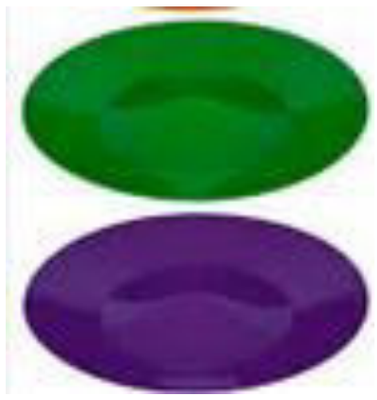
Now, slide your beans back to take apart 4. Write the numbers in the parts and whole.

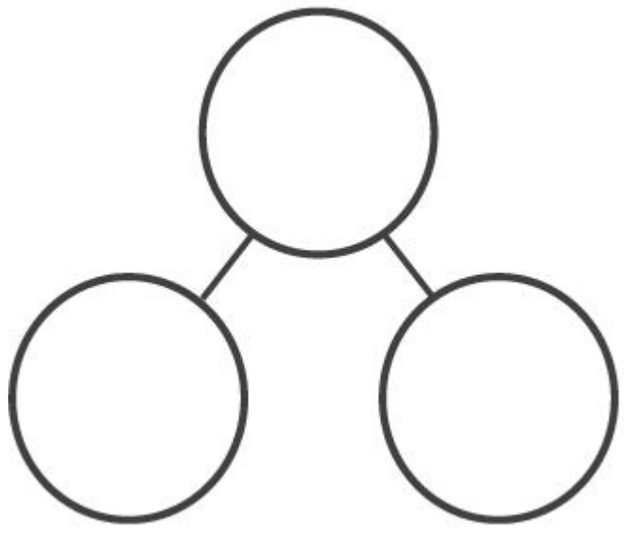


Application Problem (5 min)

Anthony had 5 bananas. Make the 5 bananas with your clay.

He wanted to share the bananas with one of his friends. Draw two plates on your paper. Put the bananas on the plates to show one way he could share the bananas with his friend. Draw a number bond to show how he shared his 5 bananas.





Application Problem (5 min)

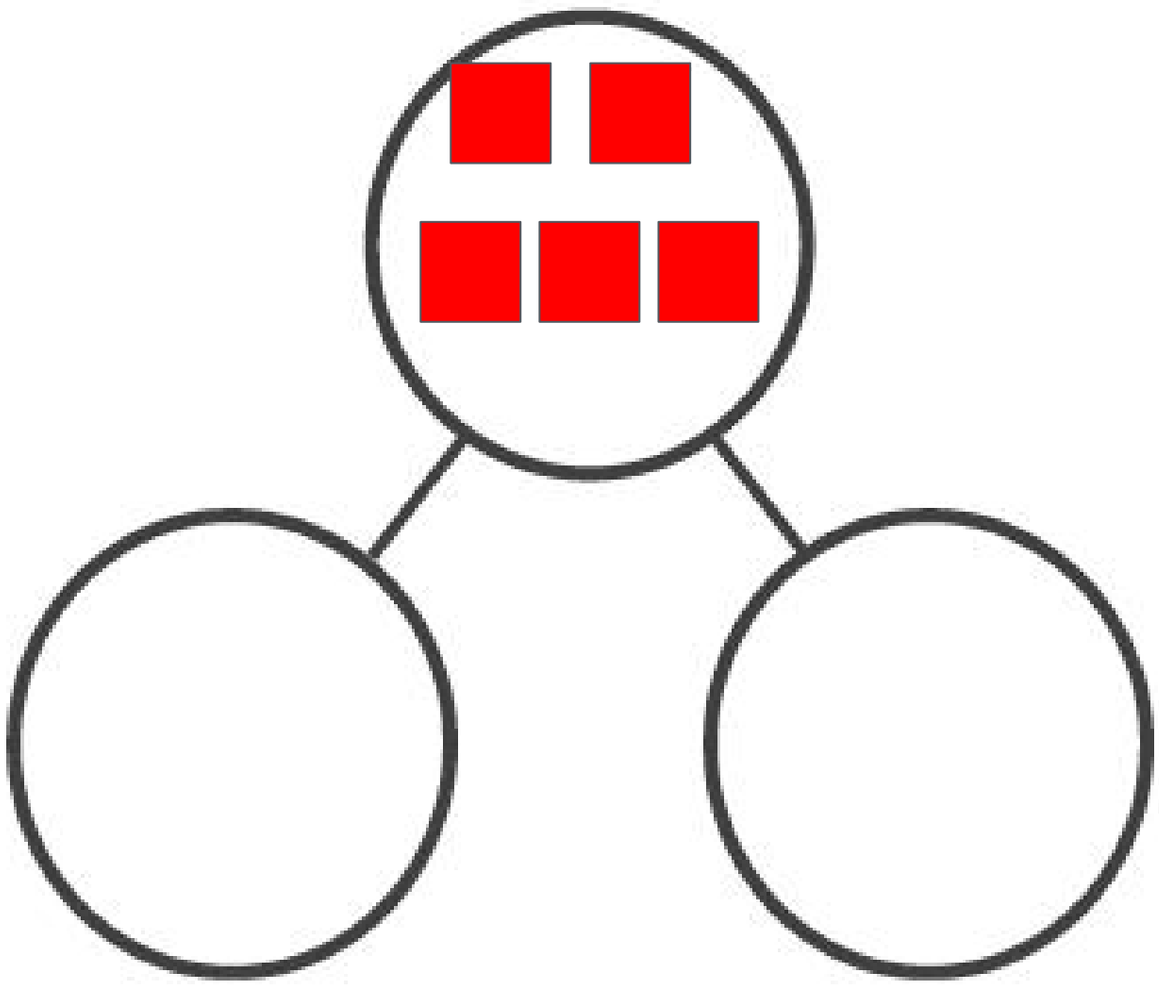
Turn and talk with your partner. Did she do it the same way? How many different ways can you find to share the bananas? What if there were only 4 bananas?

Concept Development (25 min)

Let’s pretend today! Pretend that you have 5 apples. Show me with your cubes how the group of 5 apples would look on your mat.

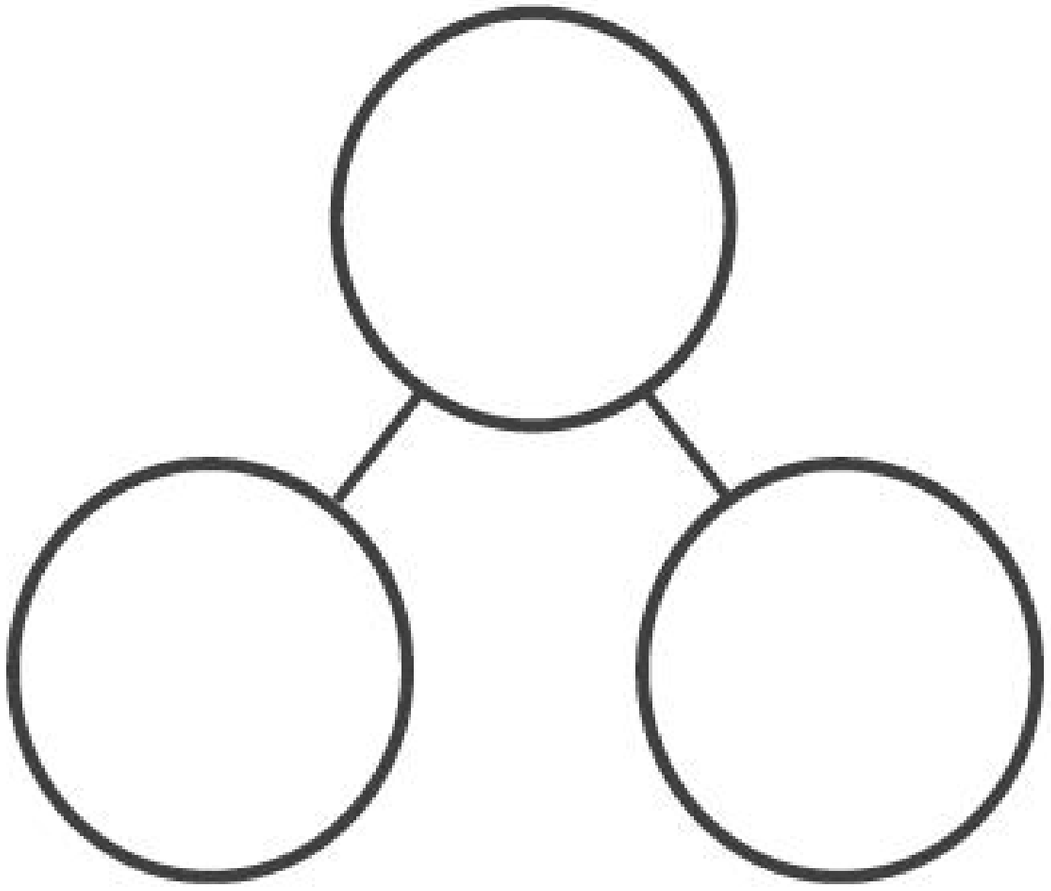
Concept Development (25 min)

I’m going to draw the linking cubes into this number bond, just like you put them in your whole.



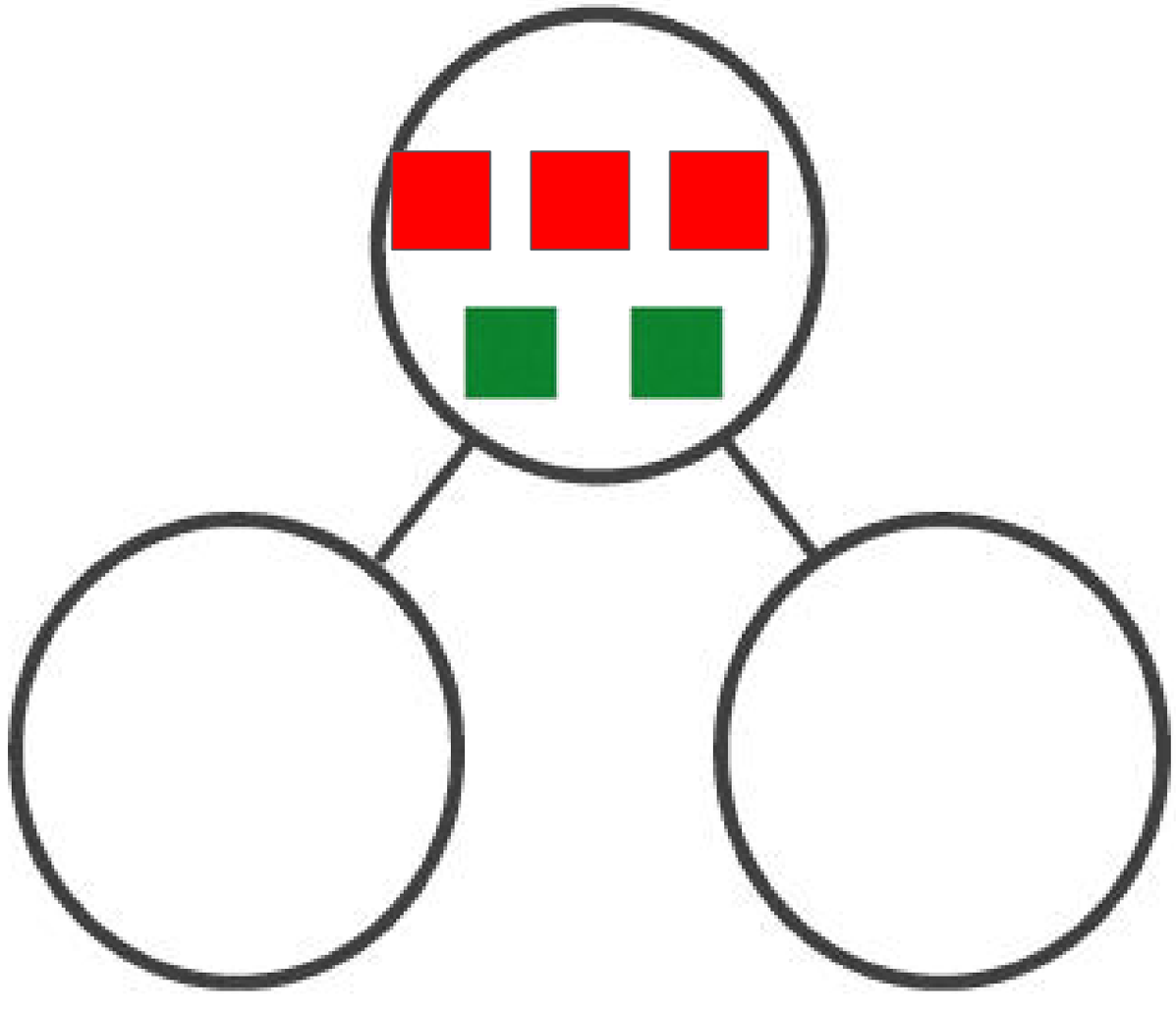
Concept Development (25 min)

Now, pretend that 3 of your apples are red and 2 are green. Show with your other set of cubes how that would look on your mat.



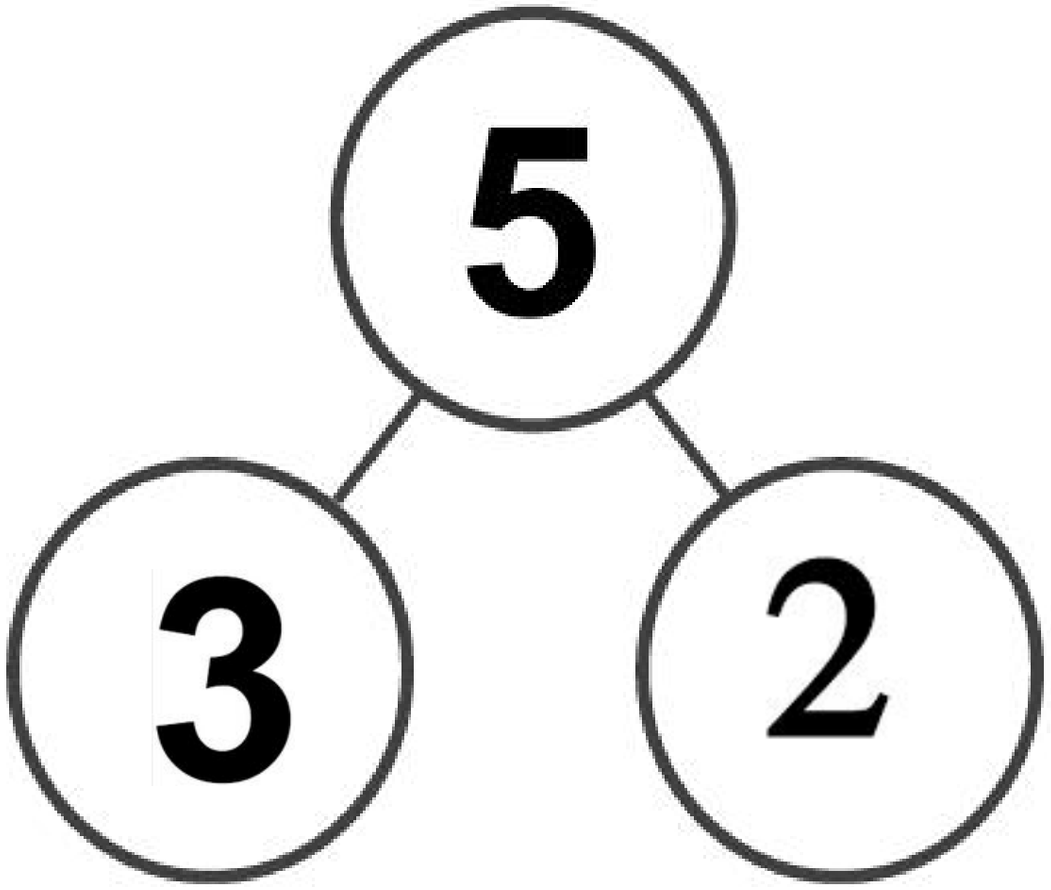
Concept Development (25 min)

Good! I'll draw those cubes in the number bond, too.
Look carefully at your groups of cubes.



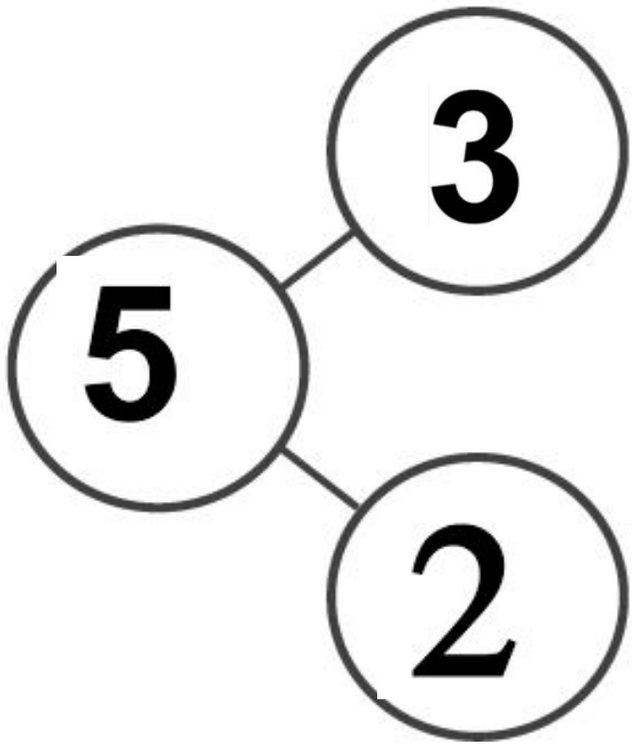
Concept Development (25 min)

Let’s show how they would look in the number bond if we used numbers instead. Take your cubes off, and write the numbers with your marker as we have done before. Who would like to tell me how to fill in our numbers?



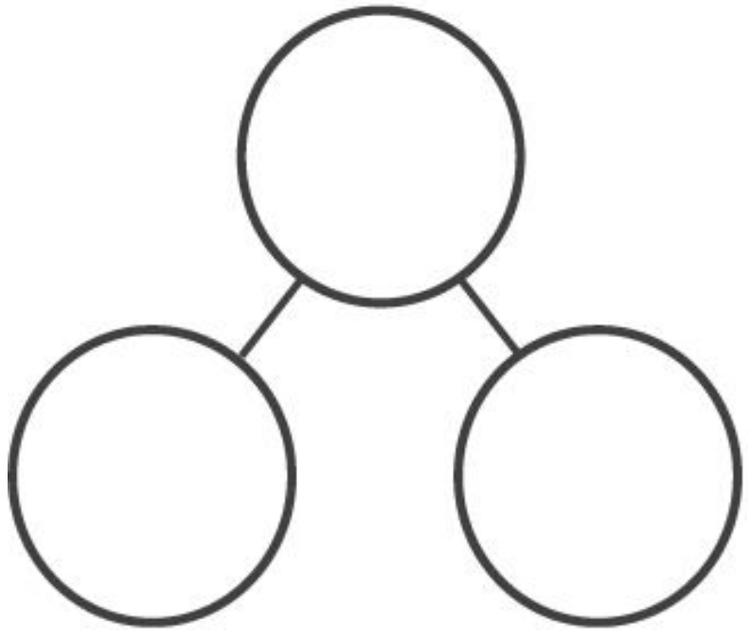
Concept Development (25 min)

Great job! You separated the 5 cubes as a set of 2 cubes and a set of 3 cubes. 5 is the same as 2 and 3 together. Did anyone do it a different way? (Allow time for discussion.)



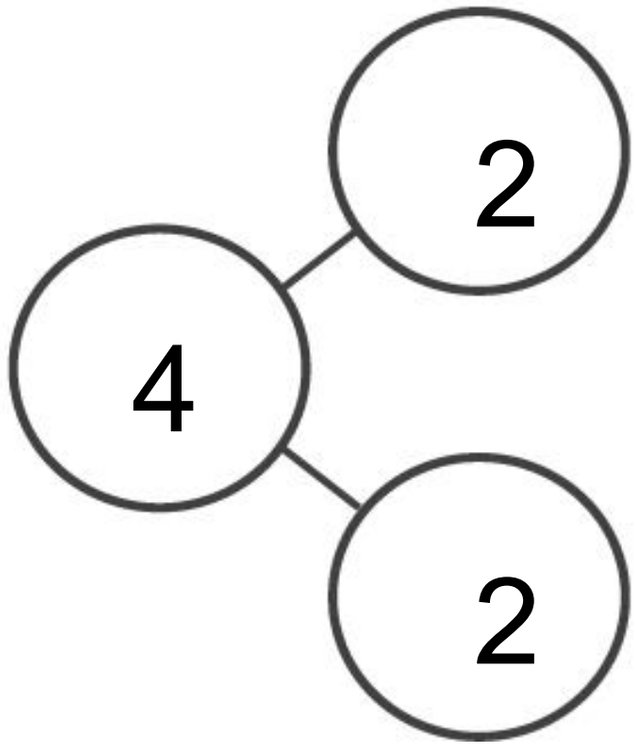
Concept Development (25 min)

Put your cubes away. Let's make a different number bond. This time, I want to pretend I have 4 balls. 1 is blue, and 3 are orange. How could I show this in my number bond picture? (Allow students to guide you in creating the pictorial number bond.) Make this number bond picture on your mat, too.



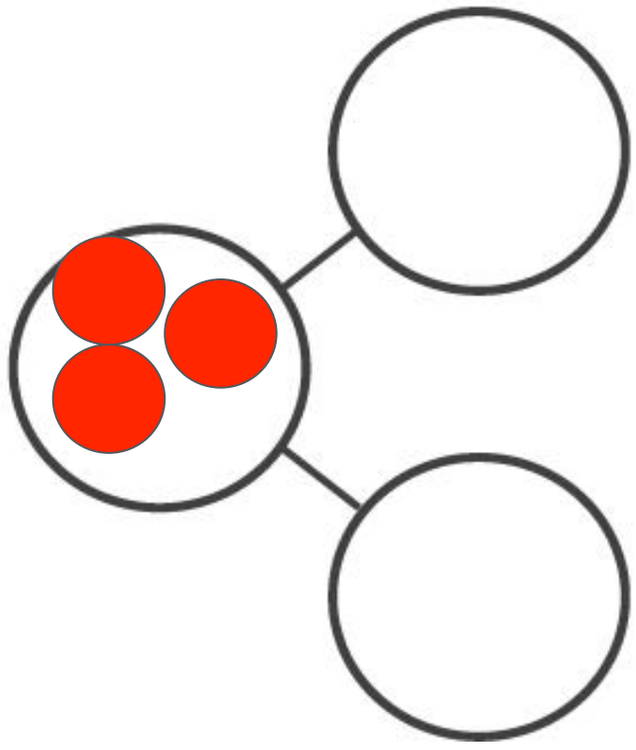
Concept Development (25 min)

Now, erase the pictures in your number bond, and write the numbers instead. Did we change our story?



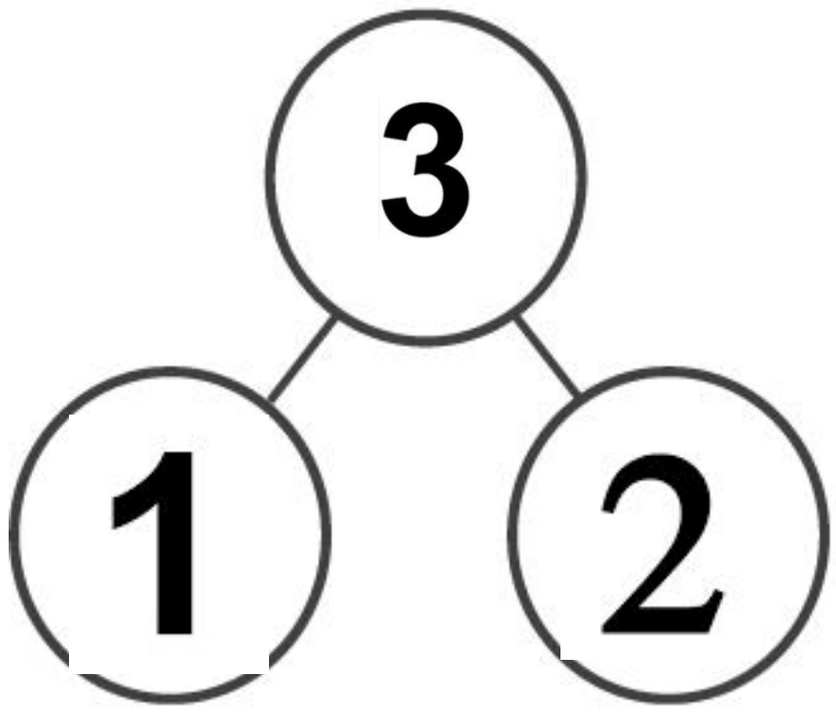
Concept Development (25 min)

Let’s make another story about 3 things. Let’s draw 3 circles for 3 things in the place for our whole. Does anyone have an idea for a story that could give us the parts of a number bond for this 3?



Concept Development (25 min)

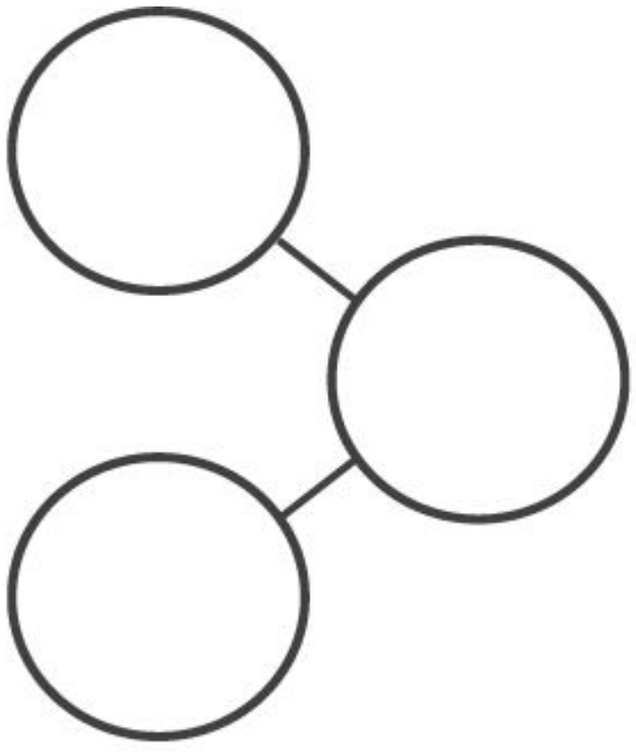
Hmmm… 1 red car and 2 blue cars. How would I show that in the number bond? (Allow time for discussion and creation of the new pictorial number bond.) Now, show me how it would look with numbers instead. Hold up your board!



Concept Development (25 min)

Let’s try more decomposition stories:

4 rabbits were hopping through the forest. When they heard a noise, 1 went under a tree, and 3 found a little cave to hide in.

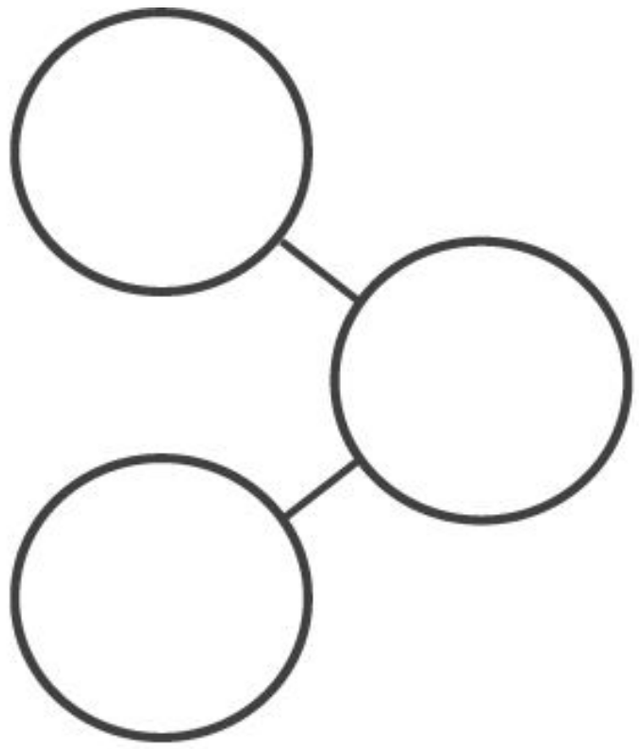


Concept Development (25 min)

Marta’s father bought 5 bananas. 2 were

eaten on Monday, and 3 were eaten on

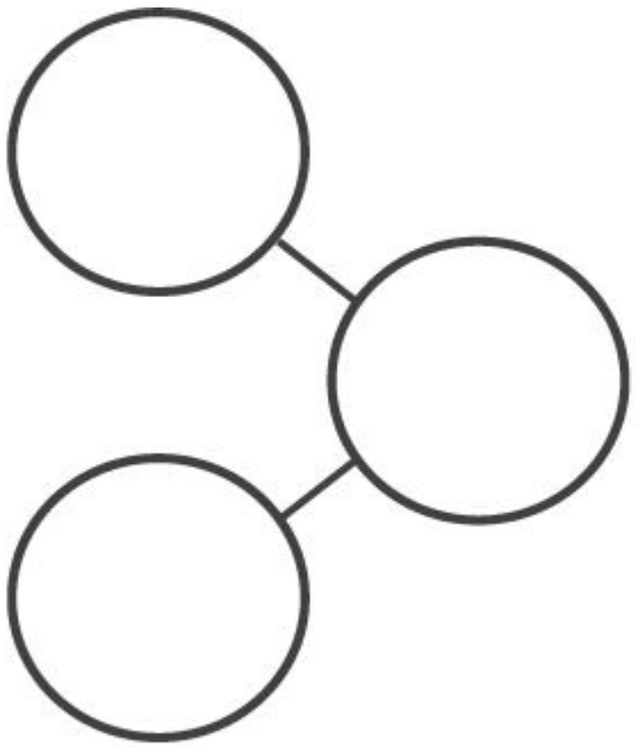
Tuesday.

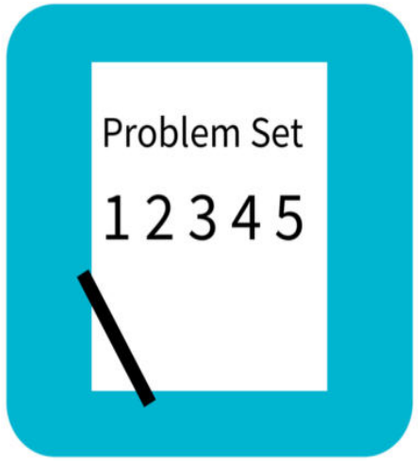


Concept Development (25 min)

Mama robin had 3 eggs. 2 eggs hatched in

the morning. 1 egg hatched in the afternoon.

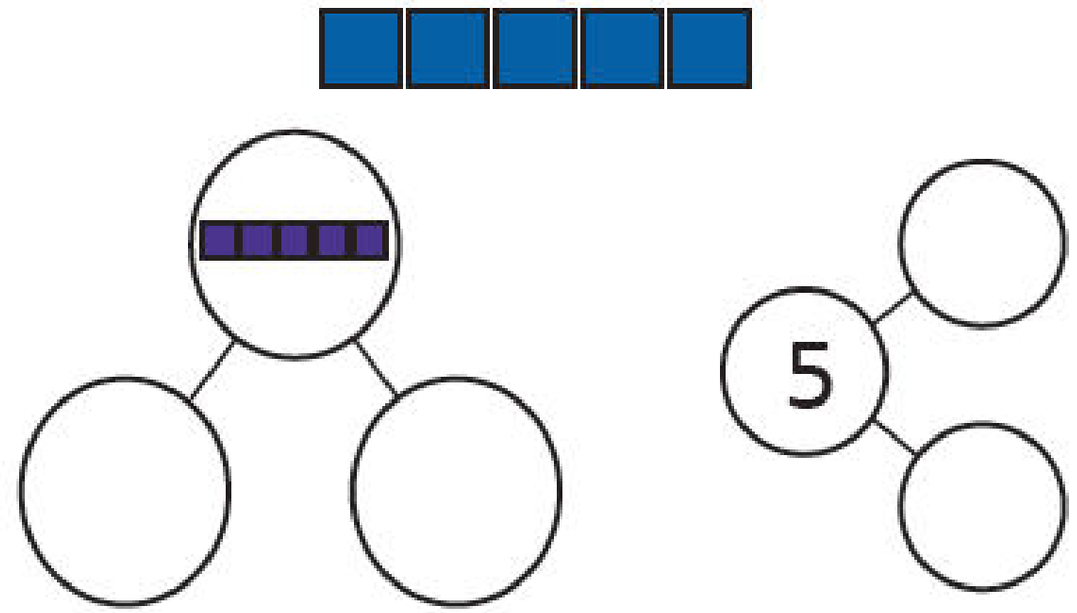


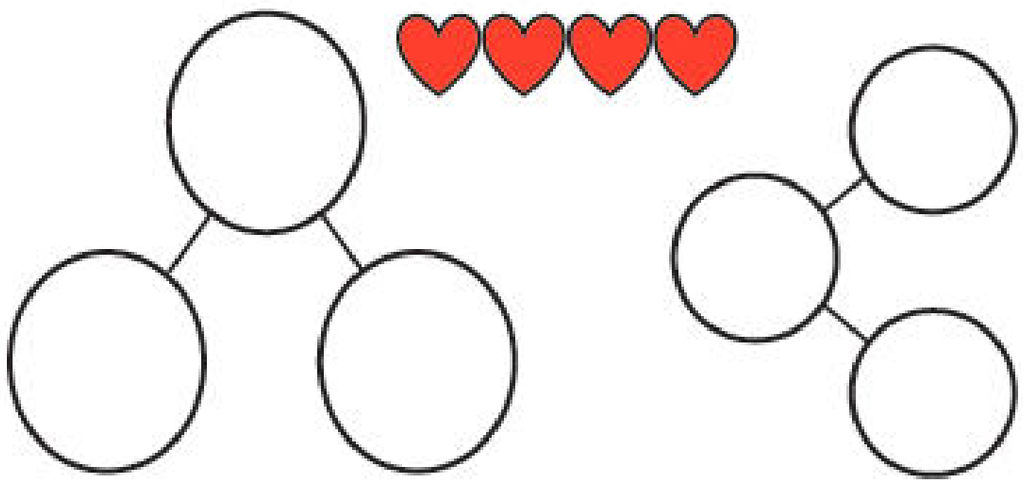


Problem Set (10 min)

Name _____ Date _____

Draw and write the numbers to complete the number bonds.





Look at the picture. Tell your neighbor a story about the dogs standing and sitting. Draw a number bond, and write numbers that match your story.

Debrief (8 min)

- Share with your neighbor the number bond you drew on your Problem Set. How are they the same? How are they different?
- Yesterday, we started with the parts and found the whole. When we started with the parts, could we figure out what the whole had to be?
- Today, we started with the whole and found the parts. When we start with the whole, can we figure out what the parts have to be, or do we need to be told more of the story? If we just know the whole, can we still figure out what the parts in our story *might* be?

Debrief (8 min)

- When we start with the whole, it makes sense to me to put the whole on top so it's as if the parts are falling down. When we start with the parts, I like to put them on top. Then, it's as if they are falling down and landing in the same spot. It doesn't have to be like that, but do you understand my thinking? Can you explain my thinking to your partner? (It is also valid to think of the story progressing from left to right. Explaining this orientation supports the pattern of reading text from left to right.)

Debrief (8 min)

- When you drew your bananas in the number bond, did your number bond look exactly like your partner's? How were they different? (Focus in on orientation of the number bond.) Does it really matter where we put the parts and the whole?
- How do we know where to write each number in a number bond?