

Progression of Tools

1 2 3 4 5 6 7 8 9 10

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0 5 10

## HOW ARE YOUR NUMBER TRACK AND NUMBER LINE DIFFERENT?



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### **Representing Active Problems**

• There were 3 apples in the bowl. Dad bought 2 more apples at the store. Now how many apples do we have?







# HOW DO EACH OF THESE REPRESENTATIONS HELP YOUR STUDENTS UNDERSTAND AND SOLVE THE PROBLEM?

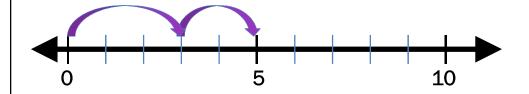


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#### **Representing Part/Whole Problems**

• There were 3 red apples and 2 green apples in the bowl. How many apples of any color are in the bowl?







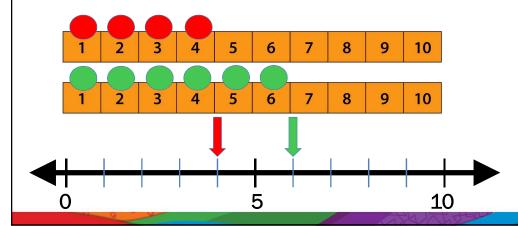
HOW DO EACH OF THESE REPRESENTATIONS HELP YOUR STUDENTS UNDERSTAND AND SOLVE THE PROBLEM?



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### **Representing Additive Comparisons**

• There are 4 red apples and 6 green apples in the bowl. How many more green apples are there than red apples?





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#### How do we help students transition?

- Use multiple concrete and visual representations of problems.
- Connect those representations to the problem context.
- Model the use and connection of these representations.
- As students build confidence with one representation, encourage them to recreate their thinking on another representation.
- · Allow students choice of which representation makes sense to them.



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## Getting Started with Number Tracks & Number Lines to Model Addition & Subtraction

Sara Delano Moore, Ph.D.
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