## inside + x = ÷ mathematics

### **Rod Trains**

### PreK

**Materials:** A set of rods (1 through 10) for each pair, paper and pencils to write or draw, color crayons, markers, or pencils

**Discussion on the rug:** Teacher gives students several rods. **"Here are some rods. What do you notice about them? What else do you notice about them?"** Teacher continues to ask children to notice that they are different colors and different lengths. The teacher encourages the students to play with them and make different things.

**In small groups:** Each group has a set of rods. Teacher asks the following questions, going on to the next question only when students have success.

#### 1. "How many rods do you have? How can you check to know for sure?"

Continue until you think students understand that you have 10. If 10 is too many, you might use fewer—such as 6.

#### 2. "Can you put the rods in order from smallest to biggest?"

At the end of the investigation, have students draw a picture to represent their solution.

3. "If this is a size 1 rod, how big are the others? Can you give each a name?" Have students write a number next to each rod drawn.

#### 4. "If you put red rods together, what other color rods can you make? Explain."

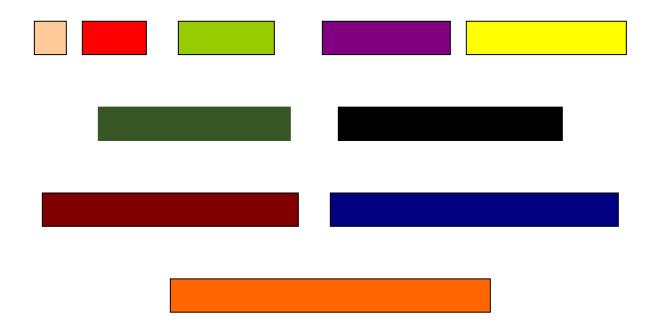
# Inside Problem Solving

- Inside Problem Solving: Rod Trains -

Inside Problem Solving: Rod Trains | © 2021 The Charles A. Dana Center at The University of Texas at Austin | This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 3.0 Unported License ((CC BY-NC-ND 3.0): https://creativecommons.org/licenses/by-nc-nd/3.0/deed.en\_US

#### - Inside Problem Solving: Rod Trains -

### **Cuisenaire Rods**



- Inside Problem Solving: Rod Trains -

Inside Problem Solving: Rod Trains | © 2021 The Charles A. Dana Center at The University of Texas at Austin | This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 3.0 Unported License ((CC BY-NC-ND 3.0): https://creativecommons.org/licenses/by-nc-nd/3.0/deed.en\_US