

KEY CONCEPT OVERVIEW

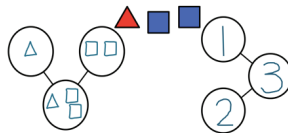
During the next week, students will learn about the **number bond**, a math model they will use through Grade 5. Number bonds show how to **put together** parts to make a whole, or total, amount; for example, 2 and 3 make 5. At the same time, these models show how to take a whole apart: 5 is 3 and 2. Since the beginning of the year, students have been using objects and drawings to break apart and put together numbers. The number bond now gives them a way to record this work on paper.

You can expect to see homework that asks your child to do the following:

- Complete a number bond to match a picture.
- Use different colors to show two different parts of a whole, and use fingers and a number bond to show the **hidden partners**, or **number pairs**.
- Complete a sentence to match the number bond; for example, 3 and 1 make 4.
- Invent a story to complete a number bond and draw a picture to match.

SAMPLE PROBLEM *(From Lesson 3)*

Draw the shapes and write the numbers to complete each number bond.



Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Invite your child to gather five small objects or toys and to tell you **take apart**/put together stories about them. For example, “There are 5 frogs. Two frogs sit on a log, and 3 frogs play in the water.”
- Encourage your child to use small objects to show various number bonds for numbers 2 through 5. For example, if the whole is 4 beans, your child might break it apart into 3 beans and 1 bean. Be sure your child includes 0 as a part in some number bonds. For an added challenge, ask your child to increase the total number of beans gradually to 10. Perhaps set a timer to see how many number bonds she can make in a minute.
- Encourage your child to practice counting the **Say Ten** way to 20 (e.g., 8, 9, ten, ten 1, ten 2, ten 3, ... 2 tens). If your child struggles, consider drawing a picture or using a **Rekenrek** as a visual support.

TERMS

Hidden partners or **number pairs/partners**: Pairs of numbers that add up to a given number. For example, the numbers 3 and 5 are partners, or pairs, that make 8.

Put together: To combine parts to make a whole; to add.

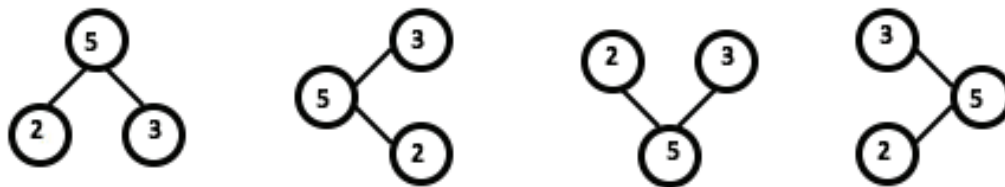
Say Ten counting: An East Asian method of counting that reinforces place value understanding by asking students to break two-digit numbers into tens and ones. In Grade 1, Say Ten counting extends to three-digit numbers up to 120.

eighteen	1 ten 8
forty-eight	4 tens 8
one hundred eighteen	1 hundred 1 ten 8

Take apart: To separate a whole number (total) into parts For example, “There are 5 children; 3 are girls, and 2 are boys.” NOTE: Take apart problems are different from take away problems in that solving take apart problems does not involve removing any parts. This distinction can be challenging for children in the early years.

MODELS

Number Bond: A model showing the relationship between a number (whole) and its parts. Grade K students work with number bonds in various orientations.



Rekenrek: A Slavonic abacus with rows of 10 beads. Each row has a group of five red and five white beads. The color groupings help students form mental images of numbers.

