

# **KEY CONCEPT OVERVIEW**

During the next few days, our math class will classify, count, and sort objects. Students will match pairs of objects according to attributes such as color, size, purpose, pattern, and position. They will discover that some pairs of items are identical ("exactly the same"), while others are similar but have differences, too. For example, "Both of these balloons are red, but one balloon is big and one is small."

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

- Identify and color objects that are identical.
- Match objects that are similar, but have minor differences.
- Draw objects that are used together. For example: a sheet of paper and a pencil, or a baseball and a glove.

#### **SAMPLE PROBLEM** (From Lesson 3)

Circle the object that would be used with the paintbrush.



- Gather a group of household items, such as kitchen utensils or articles of clothing. Encourage your child to match pairs of items, and explain how they are similar and different, using attributes such as color, size, purpose, pattern, or position. For example, your child might say, "Both of these hats are red, but one has stripes," or "Both of these are spoons, but the big spoon is for serving and the smaller one is for eating."
- Invite your child to show you how he is learning to count to five on the left hand, starting with the pinky finger (see **Counting the Math Way**).
- In preparation for work with numbers, guide your child to count up to and down from three. Change the counting direction often, using a thumb up or a thumb down to signal whether your child should count up or down. Increase the target number to four, and then five, as your child masters the skill. Have fun by challenging your child to increase her counting speed.

#### TERMS

**Counting the Math Way:** Counting from left to right, starting with the pinky of the left hand; used to set the foundation for adding "one more" and for using the number line.





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# GRADE

# **KEY CONCEPT OVERVIEW**

During the next few days, our math class will group items into categories. Students will count the items in each category and learn that the last number they reach when counting is the total number of items in that category.

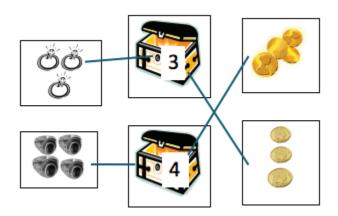
You can expect to see homework that asks your child to do the following:

- Create categories and identify things that belong in each category. For example: animals, food, and people.
- Count the number of things in each category and state the total.
- Sort things according to how many (2, 3, or 4). For example: "There are 4 birds and 3 squirrels."



**SAMPLE PROBLEM** (From Lesson 6)

Draw lines to put the treasures in the boxes.



- Cut out several pictures from a magazine, catalog, or supermarket circular. Choose pictures that show 3, 4, or 5 people or things. Invite your child to sort the pictures into a "three group," a "four group," and a "five group," according to how many people or things appear in the picture. Then ask, "How many pictures are in each group?"
- While driving or walking with your child, ask him to think of ways to sort the cars, trucks, and other vehicles into categories (by size, color, function, etc.). Choose a category and challenge your child to find and count vehicles that belong in that category.
- In class, your child has learned to count to five using the fingers of the left hand, with the pinky finger as number one (see **Counting the Math Way**). Invite your child to show you various sequences of numbers between 1 and 5 by raising and lowering the fingers of her left hand. For example, you might say, "Start at the number three and count to five. Now start at number four and count backward to two." The same activity can be done using the **Rekenrek** or another abacus.

#### TERMS

**Rekenrek:** A Slavonic abacus with rows of 10 beads. Each row has a group of 5 red and 5 white beads. The color groupings help students form mental images of numbers.

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-			-
	-		4
_	-		
	-	·	2
	10000	11111	1

Counting the Math Way: Counting from left to right, starting with the

pinky of the left hand; used to set the foundation for adding "one more" and for using the number line.



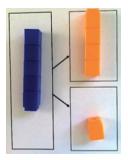


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# GRADE

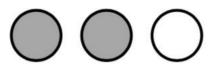
# **KEY CONCEPT OVERVIEW**

During the next week, our math class will learn about numbers to 5 as students count objects arranged in different **counting configurations** and answer the question, "How many?" Students will break apart the numbers 3, 4, and 5 and find their **hidden partners**. For example, "I see 4 cubes and 1 cube hiding inside the 5-cube stick." (See image.) Students will listen to simple number stories. ("There are 3 flowers. Two flowers are red, and 1 flower is yellow.") Then students will determine a matching expression: 2 + 1 or 1 + 2.



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

- Count objects up to 5 in linear configurations (**5-group**) and determine the total.
- Color objects to find hidden partners inside groupings of 3, 4, and 5. For example, "There are 3 circles. I see 2 shaded circles and 1 unshaded circle hiding inside 3."

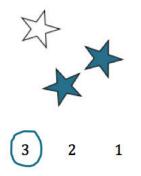


• Color shapes or draw lines to show an expression (e.g., 4 + 1).

SAMPLE PROBLEM (From Lesson 10)

Color 2 stars to see the hidden partners.

Count the objects. Circle the total number.



- During snack time, invite your child to arrange and count up to five goldfish crackers (or other small snack foods) in a line, a circle, and a scattered configuration. Encourage your child to show his counting path with a finger. For an added challenge, gradually increase the total number of items to 10.
- Hidden Partners with Dice: Roll a die and call out the number (e.g., "4"). Invite your child to find the hidden partners (e.g., "I see 1 and 3 hiding inside 4"). Note: If you roll a one, roll again until you get a higher number so your child can practice finding hidden partners.
- Invite your child to show the numbers 3, 4, and 5 on her fingers, using various combinations of fingers. Point out the hidden partners by saying, for example, "You found 2 and 2 hiding inside 4."



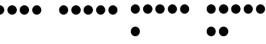
TERMS

**Counting configurations:** Various arrangements of objects for counting.

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linear	array	circular	scattered

**Hidden partners:** Two smaller numbers that add up to the total. For example, "2 and 3 are hiding inside 5."

**5-group:** A math drawing with up to two rows of 5 dots per row, used to draw special attention to the 5 in numbers 6-10.





# GRADE K MATH<sup>™</sup> TIPS FOR PARENTS

# **KEY CONCEPT OVERVIEW**

During the next week, our math class will continue to work with numbers 1–5, and use a handwriting box to write these numerals. Students will separate objects into groups of five and learn how to record number sentences. For example, "I see three things: one moon and two stars. I can tell about this picture with this number sentence: 3 = 1 + 2."

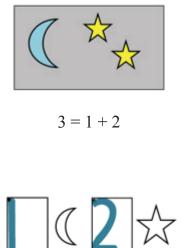
You can expect to see homework that asks your child to do the following:

- Count a set of 1 to 5 objects and use a handwriting box to write the matching numeral.
- Order numbers by filling in the missing number in a sequence.
- Solve simple addition stories connected with countable objects.

#### SAMPLE PROBLEM (From Lesson 14) \_

Write how many.

Color the picture to match the number sentence.



- Encourage your child to count a group of up to 5 objects and tell how many: "There are four blocks!" Then have him separate the objects into two groups, noticing the hidden partners smaller numbers "hiding" inside the larger quantity: "I separated 4 blocks into 1 block and 3 blocks."
- Numeral and Picture Cards: Make two sets with 5 index cards in each set. For the first set, make numeral cards by writing numerals 1–5 with one numeral per card. For the second set, make picture cards by drawing one to five dots or other objects of your choice.
  - Encourage your child to match each numeral card to the corresponding picture card. (See **5-group cards**)
  - Invite your child to place the picture cards in number order. Then match each picture card to a numeral card.
  - When your child has correctly ordered and matched the cards, ask your child to cover her eyes. Take away one numeral card, and hide it behind your back. Ask your child to open her eyes and guess which card is missing. Then invite your child to write the missing numeral.

#### TERMS \_

**5-group cards:** An image with up to 2 rows of 5 dots. Students learn many ways to break apart numbers to 10 into smaller numbers. With 5-group cards, special attention is drawn to 5 in numbers 6–10.

numerals	4	5	6
5-groups	••••	•••••	•••••





#### **KEY CONCEPT OVERVIEW**

During the next week, our math class will focus on numbers 6, 7 and 8. Students will use what they learned when counting to 5 to think about larger numbers in the more complex linear, array, circular, and scattered configurations. As students learn about numbers 6-8, the **5-group** will be highlighted: "Six is 5 and 1 more. Seven is 5 and 2 more. Eight is 5 and 3 more!"

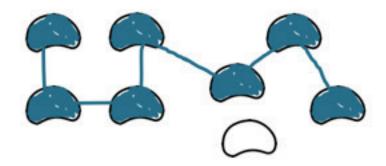


You can expect to see homework that asks your child to do the following:

- Count and color 5 objects within groups of 6–8 objects.
- Count groups of 6–8 objects arranged in a line, a circle, an array, and a scattered group.
- Write numerals 6–8 in a handwriting box.

#### **SAMPLE PROBLEM** (From Lesson 20)

Color 7 beans. Draw a line to connect the beans you colored.



- Play "Beep Number": Say 3–4 numbers in order, but replace one number with the word "beep." For example, if you say, "1, 2, beep, 4," your child responds, "3." For extra support, invite your child to use a simple **number path** so he can touch each number as you count.
- Count with your child. Place 6 objects, such as dried beans or pieces of pasta, in a line. Count them. Then arrange the objects into a circle. Ask: "How many are there now? Did the number of objects change?" Support your child by pointing out that there are still 6. Repeat for 7 and 8 objects in different arrangements.
- Place 5 objects, such as beans, in a row. Ask your child to add more beans so that there are 6 beans in the row. Repeat for 7 and 8 beans.

TERMS			

**5-group:** A math drawing with up to 2 rows of 5 dots. Five-groups draw special attention to the 5 in numbers 6–10.

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			•	••
MODELS				

**Number Path:** A counting tool with a shading change after 5, so numbers 6–10 can be easily recognized.

1 2 3 4 5 6 7 8 9 10
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# **EUREKA** GRADE K MATH<sup>TT</sup> TIPS FOR PARENTS

# **KEY CONCEPT OVERVIEW**

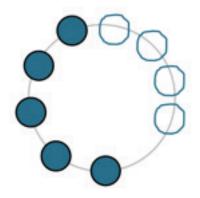
During the next week, our math class will organize and count groups of nine and ten in various configurations: linear, array, circular, and scattered. Just as they did when exploring numbers 6–8, students will learn to recognize the group of five "hiding" inside each group of 9 or 10 items. This will aid students in mastering the quicker counting on strategy ("Fiiiive, six, seven, eight, nine") rather than counting each item one at a time.

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

- Count and color groups of five within groups of 9 or 10 items.
- Count groups of 9 or 10 items arranged in a line, a circle, an array, and a scattered group.
- Count how many items appear in a picture (of 8 items or fewer). Then draw more items to increase the total to 9 or 10.
- Write numerals 9 and 10 using a handwriting box.

#### **SAMPLE PROBLEM** (From Lesson 24)

Color 5. Then draw more circles to make 9.



 $Additional \ sample \ problems \ with \ detailed \ answer \ steps \ are \ found \ in \ the \ Eureka \ Math \ Homework \ Helpers \ books. \ Learn \ more \ at \ Great Minds. org.$ 

- Invite your child to count the Math Way from 6–10 on his fingers.
- When looking at groups of 8, 9, or 10 objects, encourage your child to identify the group(s) of five "hiding" inside each larger group.
- Arrange 9 or 10 small items (such as beans, pennies, or buttons) in a circle. Invite your child to count them. Next, arrange the items into two rows. Ask, "If you count the beans now, will there still be 9 (10)?"



# GRADE K **MATH<sup>™</sup>TIPS FOR PARENTS**

# **KEY CONCEPT OVERVIEW**

During the next week, our math class will explore the idea of *one more* with numbers 0–10. Students will discover that each successive number refers to an amount that is one more than the previous number; for example, "Two. One more is three!" Students will build **number stairs,** or cube towers (see images below), to create a visual model of the *one more* pattern. This work will prepare students to compare numbers when they reach Module 3.



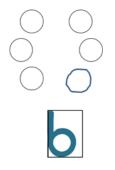


You can expect to see homework that asks your child to do the following:

- Look at a picture of 1–9 items (e.g., flowers). Then draw one more flower, count the flowers, and write the total.
- Count the dots arranged in 5-groups and write the total.
- Draw the missing number stair and write the number below each step.
- Write numerals 0-10 in a handwriting box.

SAMPLE PROBLEM (From Lesson 31) .

Draw one more circle. Then count all the circles. Write how many.



- As you set the table, count the plates (or any group of items, as long as there are 10 or fewer). Ask your child, "If I set down one more plate, how many plates will be on the table?"
- Play Counting Hearts: Separate all the heart cards, ace-10, from the rest of the deck. Scramble the heart cards so that they are not in number order. Invite your child to count the number of hearts that appear in the center of each card. Then have your child arrange the cards in number order and tell how the number of hearts on each card is one more than on the previous card; for example, "Six hearts. One more is seven!" For fun, time your child as she puts the cards in order several times. Praise her for getting faster at the task!

# MODELS \_

**Number Stairs (Number Towers):** A tool used to show the *one more* or *one less* relationship between numbers 1-10.



LEARN MORE by viewing a video about numbers through ten, number stairs (number towers), number paths, and more: eurmath.link/numbers-to-10.



For more resources, visit
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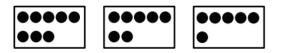
# **KEY CONCEPT OVERVIEW**

During the next week, our math class will explore the concept of *one less* with numbers 0-10; for example, "Three. One less is two!" Students will use their number stairs, or cube towers (see images below), to see the *one less* pattern and strengthen their foundational knowledge for comparing numbers in Module 3.



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

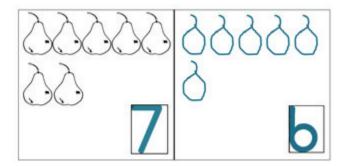
• Make 5-group cards and order them using the pattern of one less (see image).



- Look at a picture showing a group of items. Then draw a group that has one less.
- Count the number of cubes in a set of descending number stairs and notice the pattern of one less.
- Write numerals 10–0 in descending order and complete a counting sequence.

**SAMPLE PROBLEM** (From Lesson 34)

Count and write the number of objects. Draw and write the number of objects that is 1 less.



- When setting the table (or folding laundry), count the plates (or a different group up to 10) as you put each item on the table. Ask your child, "If there were one less, how many would we have?"
- Play Counting Hearts: Take the ace-10 of hearts from a deck of playing cards. Count the number of hearts in the center of each card. Put the cards in descending order, showing your child how the number of hearts is one less each time. Scramble the cards, and invite your child to put them in descending order. For fun, time your child as he puts the cards in order several times. Praise him for getting faster at the task!
- Gather two small groups of beans, buttons, or counters. Include one more item in the first group than the second. Say, "Let's count the beans in this group...four! Now, let's count the beans in this group...three!" Ask your child, "Which group has one less?"

