## GRADE FOCUS

Kindergarten mathematics is about (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space.
" Module 1: Numbers to 10

- Module 2: Two-Dimensional and Three-Dimensional Shapes
- Module 3: Comparison of Length, Weight, Capacity, and Numbers to 10
- Module 4: Number Pairs, Addition and Subtraction to 10
- Module 5: Numbers 10-20 and Counting to 100
- Module 6: Analyzing, Comparing, and Composing Shapes


## LET'S CHECK IT OUT!

## MODULE 1 FOCUS

In Module 1, students begin to observe and analyze the world around them mathematically. They will count, order, and draw up to ten objects. They will eventually work toward an understanding that each successive number names a quantity that is 1 more, and that the number before is 1 less. This is just the beginning of an exciting mathematical year for kindergarten students!

## MORE SPECCIICALLIY, CHIIDREN WILL LEARN HOW TO:

- Write numbers from 0 to 10.
- Understand the relationship between numbers and quantities.
- Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.
- Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5=2+3$ and $5=4+1$ ).
- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.


## TOPIC OVERVIEW

Topics are the lessons within a module that help children master the skills above. Here are the lessons your child will walk through in Module 1:

- Topic A: Attributes of Two Related Objects
- Topic B: Classify to Make Categories and Count
- Topic C: Numbers to 5 in Different Configurations, Math Drawings, and Expressions
- Topic D: The Concept of Zero and Working with Numbers 0-5
- Topic E: Working with Numbers 6-8 in Different Configurations
- Topic F: Working with Numbers 9-10 in Different Configurations
- Topic G: One More with Numbers 0-10
- Topic H: One Less with Numbers 0-10


## WORDS TO KNOW

- Exactly the same/not exactly the same/the same, but: ways to analyze objects to match or sort
- Match: group items that are the same or that have the same given attribute
- Sort: group objects according to a particular attribute
- Answer "how many" when counting quantities or sets
- Counting path: order of count, especially with large numbers
- Number story: stories with add to or take from situations
- Zero: understand the meaning of, write and recognize
- Number sentence: $3=2+1$
- 5-group: (pictured)
- Rows/columns: linear configuration types
- 1 more/1 less: e.g., 4. 1 more is 5, and 4. 1 less is 3

| 3 | $00 \bullet$ |
| :---: | :---: |
| 5 | $00 \bullet \bullet \bullet$ |
| 8 | $00 \bullet \bullet \bullet$ |
| 10 | $00 \bullet 0 \bullet$ |
| 5 5-Group Cards |  |

## SAMPLE PROBLEMS

## SAMPLE 1

Students will practice writing numerals from 0 to 10 in this module, practicing in boxes like those to the right until they are comfortable using just the line.


SAMPIE 2
How many apples are there all together?

3 is the same as $\qquad$ and _------.

3 apples = $\qquad$ apples + $\qquad$ apple.


## HOW YOU CAN HELP AT HOME

- Have your student practice counting groups of objects in his/her environment.
- In addition to counting, students can practice writing the numerals 0-10.
- Practice decomposing numbers, e.g. talk about how 5 is made up of a group of 2 and a group of 3 .

