

Mathematics Curriculum



GRADE K • MODULE 1

Topic H

One Less with Numbers 0-10

K.CC.4abc, K.CC.5

Focus Stand	ard:	K.CC.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
			a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
			b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
			c. Understand that each successive number name refers to a quantity that is one larger.
Instructional Days:		5	
Coherence	-Links from:	GPK-M3	Counting to 10
	-Links to:	G1-M1	Sums and Differences to 10

Topic H is a mirror image of Topic G. While students explored 1 more in Topic H, in Topic G, they explore 1 less. In Lesson 33, students use their knowledge of relationships between numbers to order quantities of objects on paper (dot cards, picture cards, and shapes) from 10 to 1 and then match 1–10 digit cards to each set of objects in descending order.

Lesson 34 extends this concept by helping students state 1 less than a given number. "Nine triangles is 1 less than 10 circles, 8 squares is 1 less than 9 triangles." Lesson 35 again helps children to kinesethtically internalize the concept of 1 less by building linking cube stairs, but this time, instead of starting at the bottom on the first cube, there is a princess in a tower who walks down the stairs starting at the top 10-cube stair. The children discuss what is happening as the princess walks down each step. From this concrete exercise, students are then asked to arrange, analyze, and draw 1 less configurations other than the stair or tower format. They might be given a group of objects to count on paper in a scattered or circular formation and then asked to cross out 1 object from the group and count again.

To conclude this module, the students are given a culminating task that calls on them to use what they have learned to complete a series of tasks.



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A Teaching Sequence Towards Mastery of *One Less* with Numbers 0–10

- Objective 1: Order quantities from 10 to 1 and match numerals. (Lesson 33)
- Objective 2: Count down from 10 to 1, and state 1 less than a given number. (Lesson 34)
- Objective 3: Arrange number towers in order from 10 to 1, and describe the pattern. (Lesson 35)
- Objective 4: Arrange, analyze, and draw sequences of quantities that are 1 less in configurations other than towers.

 (Lesson 36)
- Objective 5: Culminating task

 Decide how to classify the objects in your bag into two groups. Count the number of objects in each group. Represent the greater number in various ways. Next, remove the card from your pack that shows the number of objects in the smaller group. Put your remaining cards in order from smallest to greatest. Your friends will have to figure out what card is missing when they visit your station!

(Lesson 37)



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