

# Computing & Measuring with Frogs & Bugs

In this unit, your student will:

- Count by 10s and 1s
- Estimate, measure, and compare length
- Solve addition and subtraction word problems within 10
- Write equations to match images
- Read, write, order, and compare numerals to 20



Your student will practice these skills by solving problems such as these:

PROBLEM	COMMENTS
<p>Choose a card to show how many bugs you caught. Build the number with cubes. Write the equation. Circle the equation that shows the greater total.</p> <p><i>I caught 13 bugs. You caught 10 and 8... so 18. You caught more bugs.</i></p>	<p>Frogs and bugs are the focus of engaging games and activities in Unit 8 that serve to strengthen the math skills learned during the year. In this game, Count &amp; Compare Bugs, partners take turns drawing Double 10-Frame Dot Cards to find out how many bugs they get. They build the sums with their number racks and determine whose is greater. Then players record their totals as “10 and some more” equations on their record sheets, and they circle the sum that is greater.</p>
<p>How many cubes long is the chair seat?</p> <p><i>It's 10... 20... 21, 22, 23. The seat of my chair is 23 cubes.</i></p>	<p>Students measure classroom objects using cubes grouped into sets of 10. They count by 10s and 1s to determine the length of each object, then record their results in picture and number form.</p>
<p>Show 2 ways you see the dots. Circle the dots and write an equation for each image.</p> <p><i>I see two groups of 3. 3 + 3 = 6 I also see 5 and 1 more. 5 + 1 = 6</i></p>	<p>Students engage in a series of repeated routines called dot talks. In these dot talks, they share how they see an arrangement of dots and write equations to match their thinking. As the unit progresses, students make their own dot cards to share with classmates who describe how they see the dots.</p>

## Frequently Asked Questions About Unit 8

### Q: What can I do over the break to help my student prepare for first grade?

**A:** The summer months are a perfect time to enhance your student's math skills with everyday fun and games. By the end of kindergarten, children should be counting to 100 by 1s and 10s, reading and writing numbers to 20, counting groups of 20 or more items, and using pictures and objects to solve simple addition and subtraction problems within 5 and 10. Activities that focus on these skills are great choices.

Whether at the park, in the kitchen, indoors or out, count and compare the things you see and use: rocks, flowers, seashells, silverware, dishes, toys, and so on. Ask more-or-less questions such as, "Are there more smooth rocks or bumpy rocks? Red flowers or yellow flowers? How do you know?" Blowing bubbles is always fun. Have your student count as many as they can before they pop. At the grocery store, invite your student to count the items you want to buy, like 6 apples or 10 carrots. While driving or waiting in lines, practice counting forward and backward, starting and stopping on different numbers. When you're on a walk or in the car, read address numbers, license plate numbers, and numbers on signs. Sidewalk chalk is a great way to practice writing numbers. Consider drawing a hopscotch board and taking turns jumping and calling out the numbers. Use snack foods or small toys to solve simple addition and subtraction problems. Ask questions such as, "How many do we have in all? How many more are needed to make 5? To make 10? How many would we have if we took away 2? How did you figure that out?" Encourage your student to ask you some math questions as well.

Shapes are everywhere. Talk with your student about the shapes you see from the buildings in your neighborhood or the shapes of boxes and cans at the store. A warm day outside playing with water and measuring cups offers a fun setting for learning about liquid volume and weight. Plant something together, then measure and record its growth over time. Visit the library and find books about counting, measuring, shapes, and other math topics. (See the following suggested titles.) Read these books together. Most importantly, have fun using math with your student!

To further support your student in learning mathematics, you can:

- Visit [mathathome.mathlearningcenter.org](http://mathathome.mathlearningcenter.org) and do some or all of the activities in Kindergarten: Summer Medley together. These activities complement the learning taking place in the classroom during Unit 8 and provide fun ways to engage children in mathematical thinking.
- Encourage your student to teach others how to play the take-home versions of three familiar math games. These games provide practice with addition, subtraction, and place value. Your student will also leave kindergarten with a number path and grasshopper pointer similar to the ones they've used at school this year. Hopping forward and backward on the number path will help them practice the number sequence and identification of numbers within 50.
- Visit [apps.mathlearningcenter.org](http://apps.mathlearningcenter.org) and invite your student to explore any of the following apps: Geoboard, Number Chart, Number Frames, Number Rack, and Pattern Shapes. Featuring tools that students used throughout kindergarten, these apps will support them in representing their thinking and solving problems.
- Count, make up math stories, and identify shapes while reading together. While most picture books can be used for these purposes, some suggestions for this unit include:
  - » *Rooster's Off to See the World* by Eric Carle
  - » *Twenty is Too Many* by Kate Duke
  - » *Baby Goes to Market* by Atinuke, illustrated by Angela Brooksbank
  - » *A Bag Full of Pups* by Dick Gackenbach
  - » *Saturday* by Oge Mora
  - » *Quinito's Neighborhood/El Vecindario de Quinito* by Ina Cumpiano, illustrations by José Ramírez