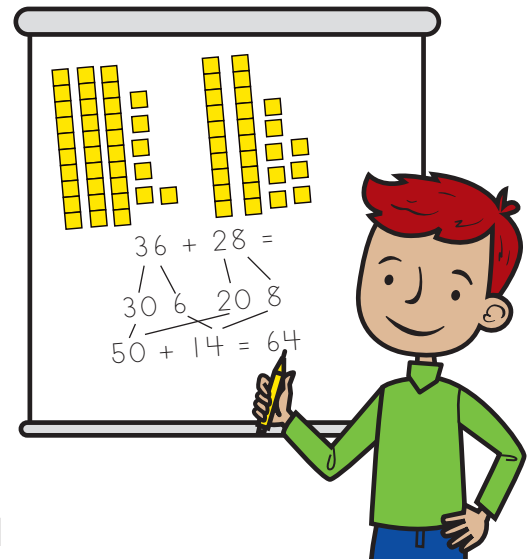Bridges in Mathematics
Grade 3 Unit 1
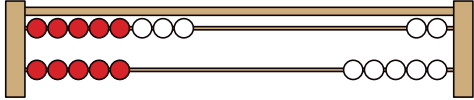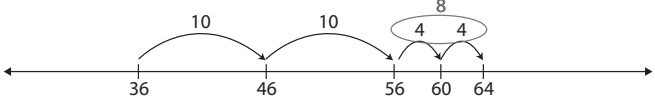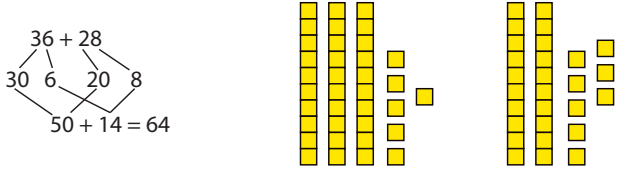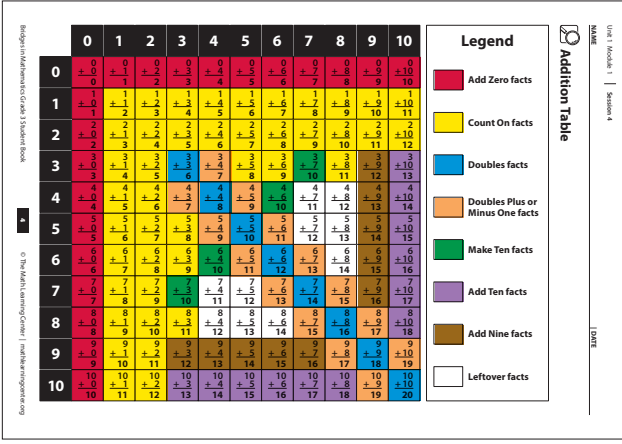
Addition & Subtraction Patterns

In this unit your child will:

- Use efficient math strategies to build fluency with basic addition and subtraction facts

- Determine whether two expressions are equal

- Write equations to represent one-step story problems

- Use strategies based on place value, properties of operations, or the relationship between addition and subtraction to fluently add and subtract within 100

Your child will learn and practice these skills by solving problems like those shown below. Use the free Math Vocabulary Cards app for additional support: mathlearningcenter.org/apps

PROBLEM	COMMENTS
	Third grade students get acquainted by creating pictures that share information about their learning preferences. Sorting, classifying, and graphing this information sets the stage for algebraic reasoning and data collection.

PROBLEM	COMMENTS
8 + 5 = ___	The number rack helps students visualize quantity and encourages them to think in groups. A child may "see" the number 8 as a combination of 5 and 3 more 5 red beads and 3 more white (beads). To solve 8 + 5, then, the student can add 5 + 5 = 10 and then 10 + 3 = 13.
	Students will also use the number line or find the difference between two numbers. Initially, they may begin by counting on and then to jumping or counting in groups of tens and ones. For example, the difference between 36 and 64 is 28, which is shown on the number line as 2 jumps of 10 followed by 2 jumps of 4.
36 + 28 30 6 20 8 50 + 14 = 64	Students break numbers apart by place value in order to add them. For example, they break 36 into 30 and 6 and 28 into 20 and 8. Then, they add 30 and 20 and 6 and 8 separately. Finally, they add 50 and 14 for a total of 64. This is an important precursor to using the standard algorithm with understanding and fluency.
	Students review strategies for the basic addition and subtraction facts, many of which rely on the commutative (4 + 2 = 2 + 4) and associative (4 + 2) + 3 = 4 + (2 + 3) properties. They study patterns on the addition table and extend the strategies for use with larger numbers.

FREQUENTLY ASKED QUESTIONS ABOUT UNIT 1

Q: Why do some of these activities look like what my child did in second grade?

A: This unit reviews mathematical concepts while introducing and establishing routines that will be used in third grade. Teachers assess students' skill level and plan future lessons based on this review. When students build addition and subtraction facts on the number rack and generalize their understanding of number relationships to problem solving situations with larger numbers, this contributes to their ability to compute fluently.