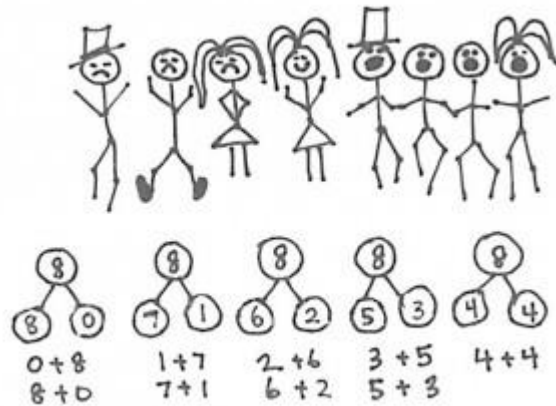


Module 4 Grade 1

In this unit your student will:

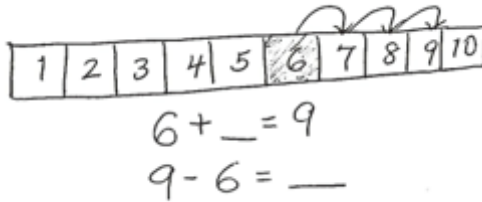
- ✓ Make significant progress towards fluency with addition and subtraction of numbers to 10
- ✓ Continue the work of developing this ability with all the numbers within 10 in *put together* situations, with a special focus on the numbers 6,7,8,9
(ex ? +6 =10)
- ✓ Students see and describe *1 more* as + 1
- ✓ Students are preparing to solve addition problems by counting on rather than counting all



- ✓ They describe *put together* situations (pictured above) with number bonds and count on from the first part to totals of 6, 7, 8, 9, and 10
- ✓ Students interpret the meaning of addition from *adding to with result unknown* or *putting together with result unknown* story problems by drawing their own pictures and generating solution equations. (See image)



- ✓ Students solve *add to with change unknown* problems such as, “Ben has 5 pencils. He got more pencils from his mother. Now he has 9 pencils. How many pencils did Ben get from his mother?”



- ✓ Students expand their knowledge of two basic ideas of mathematics: equality and the commutativity of addition
- ✓ They learn to recognize doubles and doubles plus 1.
- ✓ They analyze the addition chart for repeated reasoning and structures (such as 5-groups, plus ones, doubles, sums equal to 10, etc.) that can help them to better understand relationships and connections between different addition facts
- ✓ Students solve different problem types involving subtraction
- ✓ Students will work on story problems to work on a more abstract level by visiting methods for subtraction
- ✓ Students create sets of related addition and subtraction facts and use dialogue to explain their found connections

$$(7 = 4 + 3, \quad 7 - 4 = 3, \quad 4 + 3 = 3 + 4, \quad 4 = 7 - 3, \text{ etc.})$$

Terminology:

- ✓ Number Bonds – used to make addition and subtraction sentences
<http://www.youtube.com/watch?v=kn26on8U1X4>
- ✓ Compose – putting numbers together
- ✓ Decompose – taking numbers apart
- ✓ Commutativity - The "Commutative Laws" say we can **swap numbers** and still get the same answer. Ex $4+3 = 3+4$
- ✓ Expressions – Numbers, symbols and operators grouped together ex. $4 \times 3 =$

- ✓ Subitize – the ability to see a small number of objects and know how many without counting
- ✓ Addends – the numbers to be added together. Ex in $2+4 = 6$ the addends are 2 and 4

Activities you can do at Home:

- ✓ Play games with your child with common household objects that require them to add groups within 10.
- ✓ Play games with your child with common household objects that require them to subtract groups within 10.
- ✓ Consider reading Apple Countdown with your student.