## GRADE FOCUS

## First Grade mathematics is about (1) learning strategies for adding and subtracting within 20; (2) developing an understanding of whole number relationships and place value, including grouping in tens and ones; (3) measuring length and using length units such as centimeters; and (4) reasoning about the qualities of shapes.

» Module 1: Sums and Differences to 10

- Module 2: Introduction to Place Value Through Addition and Subtraction Within 20
- Module 3: Ordering and Comparing Length Measurements as Numbers
- Module 4: Place Value, Comparison, Addition and Subtraction to 40
- Module 5: Identifying, Composing, and Partitioning Shapes
- Module 6: Place Value, Comparison, Addition and Subtraction to 100


## ETTS CHECKITOUT!

## MODULE 1 FOCUS

In this first module of Grade 1, students make significant progress toward fluency with addition and subtraction of numbers to 10. They are presented with opportunities designed to advance them from counting all to counting on. This leads many students to decomposing and composing total amounts. This module is an important foundational piece for our first grade mathematicians.

## MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

- Use addition \& subtraction within 10 to solve word problems.
- Understand subtraction as an unknown-addend problem. For example, subtract $10-8$ by finding the number that makes 10 when added to 8 .
- Add and subtract within 10 using strategies such as counting on.
- Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of


## TOPIC OVERVIEW

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

- Topic A: Embedded Numbers and Decompositions
- Topic B: Counting On from Embedded Numbers
- Topic C: Addition Word Problems
- Topic D: Strategies for Counting On
- Topic E: The Commutative Property of Addition \& the Equal Sign
- Topic F: Development of Addition Fluency Within 10
- Topic G: Subtraction as an Unknown Addend Problem
- Topic H: Subtraction Word Problems
- Topic I: Decomposition Strategies for Subtraction
- Topic J: Development of Subtraction Fluency Within 10


## WORDS TO KNOW

- Count on: Students count up from one addend to the total, e.g. for $5+4$ they would start with 5 , then count 6..7..8..9 to get the total of 9
- Expression: e.8., $2+1$ or $5+5$ (expressions do not have an equals sign, thus are not equations)
- Addend: One of the numbers being added in an addition problem
- Doubles: e.g., $3+3$ or $4+4$
- Doubles plus 1: e.g., $3+4$ or $4+5$
- Part: e.g., "What is the unknown part? 3 + $\qquad$ $=8 "$
- Equation and number sentence: these words are used interchangeably throughout the module
- Number Bond: a graphic showing part/part/whole
 the following equations are true and which are false? 6 $=6,7=8-1,5+2=2+5,4+1=5+2$.


## SAMPLE PROBLEMS

| $1+2$ | $1+3$ |
| :--- | :--- |
| $2+2$ |  |
| $3+2$ | $3+3$ |

Students will learn to solve related addition problems.


Number bonds are used to relate addition and subtraction.

## SAMPIE 2

How many animals do you see? Write at least 2 different number bonds to show different ways to break apart the total.


## HOW YOU CAN HELP AT HOME

- Practice "counting on" as a strategy for addition, e.g. if you have 7 LEGO pieces, and then you get 3 more, encourage your student to start with the number 7 and count "8...9...10" to find the total.
- Discuss various ways to take apart a given number, e.g. 6 is made of 1 and 5,2 and 4,3 and 3, etc.

