

Math Tips for Parents

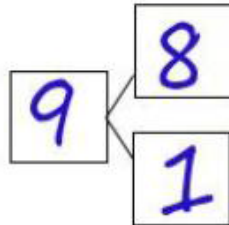
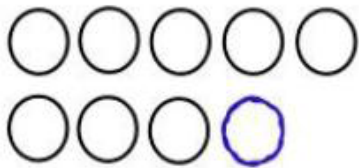
First Grade Module 1

Sums and Differences to 10

In Module 1, students make significant progress towards fluency with addition and subtraction of numbers to 10. They are presented with opportunities intended to advance them from counting all to counting on, which leads many students then to decomposing and composing addends and total amounts.

Key Standards:

- Use addition and subtraction within 20 to solve word problems
- Apply properties of operations as strategies to add and subtract.
- Understand subtractions as an unknown-addend problem
- Relate counting to addition and subtraction (e.g., by counting on 2 to add 2)
- Add and subtract within 20, demonstrating fluency for addition and subtraction within 10
- Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false
- Determine the unknown whole number in an addition or subtraction equation relating three whole numbers



1 more than 8 is 9.
 $8 + 1 = \underline{9}$

Number Bond

total

5

.....

2

3

part

part

sum

$5 + 4 = 9$

addend

New Terms, Phrases, and Strategies in this Module:

Number bond: shows the whole and the parts of a number

5-group: a row of five items

Count on: count from one number to the total. Example: $2+3=5$. Start at the larger number (3) and count 2 more (4,5). Think 3 count 4, 5.

Expression: e.g., $2+1$ 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 $4+4$

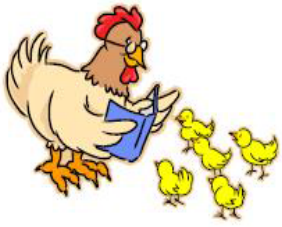
Doubles plus 1: e.g., $3+4$ or $4+5$

Part: "what is the unknown part? $3+ \underline{\quad} = 8$ "

Equation and number sentence: these words are used interchangeably throughout the module

Number Bond: a graphic showing part/part/whole

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5	1	6		
5	+	1	=	6
1	+	5	=	6

Fill in the missing part of the number bond and count on to find the total. Then write 2 addition sentences for each number bond.

Students will work with story problems to solve equations. (An equation is a math sentence with an equal sign.)

4	+	3	=	7
Tracy has <u>7</u> cats.				

Tracy has 3 orange cats and 4 white cats. How many cats does Tracy have?

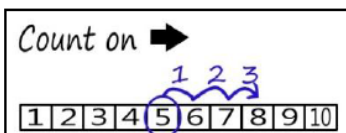
Students will focus on the skill of counting on. Remember to find the larger number first. Keep 5 in your head, and count on.



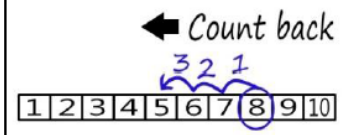
5+2=?

A number line is another way to solve story problems.

Count on - start with the smallest number and count on to the larger number.



Count back - start with the larger number and count back to the smaller number.



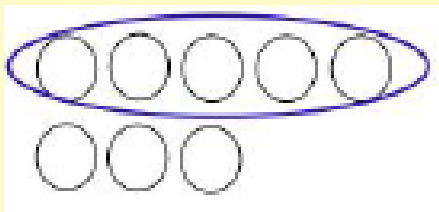
In both cases circle the number to represent where to start.

Number Bond Dashes will be done in order to provide fluency when decomposing numbers.

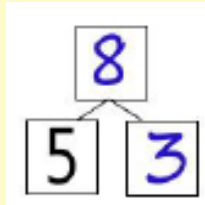
Break the total into parts. Write a number bond and addition and subtraction number sentence to match the story.

Charlie caught 8 fish at the end of the day. He caught 3 in the morning. How many fish did he catch in the afternoon?

8	3	+	5	=	8
8	-	3	=	5	
Charlie caught <u>5</u> fish in the afternoon.					



Circle 5 and make a number bond.

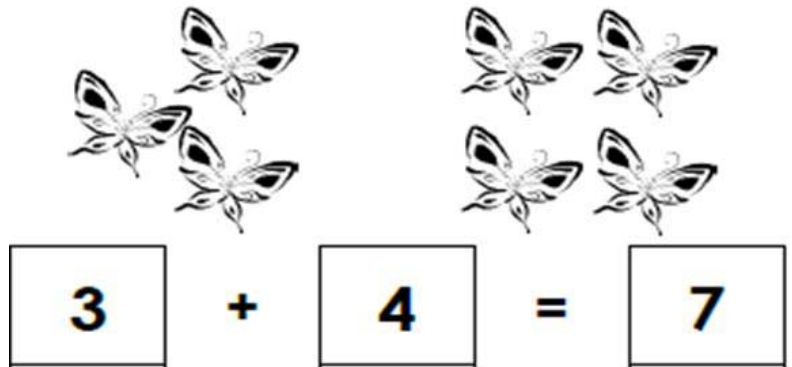


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Related Facts Ladder

doubles	$3+4 = 7$	
+1	$3+3 = 6$	doubles
	$2+2 = 4$	
adding	$2+1 = 3$	both
1 more	$3+1 = 4$	adding 1

Count on and add.



There are 7 butterflies all together.

How you can help at home....

- Roll single digit numbers and add them together.
- Roll 2-digit or 3-digit numbers and add them together.
- Add all the digits of your house number together.
- Make a train with Legos or colored blocks. Write a number sentence for the different colors in the train.
- Add the price of two items at a store.
- Compare gas prices to find the lowest amount.
- Start with 20 counters (beans, pennies, etc.) and roll two dice to make a 2-digit number. Subtract counters until you get to 0.
- Give your student an addition or subtraction number sentence and ask them to make up a story problem to go with the number sentence.
- Make a physical array with counters and record on paper using symbols.
- 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.